

THIRTY-THIRD ANNUAL REPORT

OF THE

Board of Trustees

OF THE

OHIO STATE UNIVERSITY

TO THE

Governor of Ohio

FOR THE

YEAR ENDING JUNE 30, 1903.

BOARD OF TRUSTEES

1902-1903

THOMAS J. GODFREY	Celina	May 13, 1903
J. McLAIN SMITH	Dayton	" 1904
PAUL JONES	Columbus	" 1905
OSCAR T. CORSON	Columbus	" 1906
DAVID M. MASSIE	Chillicothe	" 1907
JOHN T. MACK	Sandusky	" 1908
MYRON T. HERRICK	Cleveland	" 1909
GUY W. MALLON	Cincinnati	" 1910

OFFICERS OF THE BOARD

OSCAR T. CORSON	President.
PAUL JONES	Vice-President.
ALEXIS COPE	Secretary
T. W. PRENTISS	Treasurer.

COMMITTEES OF THE BOARD.

EXECUTIVE	FARM	FINANCE
(1) T. J. GODFREY	J. McLAIN SMITH	D. M. MASSIE
J. McLAIN SMITH	JOHN T. MACK	PAUL JONES
PAUL JONES	O. T. CORSON	MYRON T. HERRICK
GUY W. MALLON		

FACULTY AND COURSE OF STUDY.

(1) T. J. GODFREY	(1) T. J. GODFREY	OSCAR T. CORSON
	JOHN T. MACK	
	GUY W. MALLON	

(1) Term expired May 13, 1903.

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MEMBERS OF THE FACULTY AND OTHER INSTRUCTORS.

1900--1901

WILLIAM OXLEY THOMPSON,
President—University Grounds.

THOMAS CORWIN MENDENHALL,
Emeritus Professor of Physics—Florence, Italy.

ROBERT WHITE McFARLAND,
Emeritus Professor of Civil Engineering—Oxford, Ohio.

SIDNEY AUGUSTUS NORTON,
Emeritus Professor and Lecturer in General Chemistry—363 East Town street.

STILLMAN W. ROBINSON,
Emeritus Professor of Mechanical Engineering—1353 Highland street.

WILLIAM HENRY SCOTT,
Professor of Philosophy—131 Fifteenth avenue.

NATHANIEL WRIGHT LORD,
Professor of Mineralogy and Metallurgy, and Director of the School Mines—338 West
Eighth avenue.

SAMUEL CARROLL DERBY,
Professor of Latin—93 Fifteenth avenue.

WILLIAM RANE LAZENBY,
Professor of Horticulture and Forestry—348 West Eighth avenue.

JOSIAH RENICK SMITH,
Professor of the Greek Language and Literature—950 Madison avenue.

HENRY ADAM WEBER,
Professor of Agricultural Chemistry—1342 Forsythe avenue.

BENJAMIN FRANKLIN THOMAS,
Professor of Physics and State Sealer of Weights and Measures—University Grounds.

GEORGE WELLS KNIGHT,
Professor of American History and Political Science, and of Law—85 Jefferson avenue.

ROSSER DANIEL BOHANNAN,
Professor of Mathematics—Sixteenth and Indianola avenues.

(1) ERNST AUGUST EGGERS,
Professor of Germanic Languages and Literatures—University Grounds.

ALBERT MARTIN BLEILE,
Professor of Anatomy and Physiology—218 King avenue.

WILLIAM ASHBROOK KELLERMAN,
Professor of Botany—175 Eleventh avenue.

THOMAS FORSYTHE HUNT,
Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science—
188 West Tenth avenue.

GEORGE BEECHER KAUFFMAN,
Professor of Pharmacy, and Dean of the College of Pharmacy—University Grounds.

BENJAMIN LESTER BOWEN,
Professor of Romance, Languages and Literatures—775 E. Broad street.

JOSEPH VILLIERS DENNEY,
Professor of Rhetoric and the English Language, and Dean of the College of Arts,
Philosophy and Science—230 West Tenth avenue.

ALLEN CAMPBELL BARROWS,
Professor of English Literature—85 West Tenth avenue.

(1) Died April 8, 1903.

EDWARD ORTON, JR.,

Professor and Director of the Department of Clay Working and Ceramics, and Dean of the College of Engineering—The Normandie.

WILLIAM FOREST HUNTER,

Dean of the College of Law and Professor of Law—1032 Bryden Road.

JAMES HENRY COLLINS,

Professor of Law—The Chittenden; New Hayden Building.

EMILIUS OVIATT RANDALL,

Professor of Law—1025 Oak street; Supreme Court Building.

WILLIAM THOMAS MAGRUDER,

Professor of Mechanical Engineering—191 King avenue.

EDGAR BENTON KINKEAD,

Professor of Law—Wyandotte avenue; New Hayden Building.

WILLIAM HERBERT PAGE,

Professor of Law—1068 Franklin avenue; 27 Board of Trade.

WM. McPHERSON, JR.,

Professor of Chemistry—University Grounds.

JOSEPH NELSON BRADFORD,

Professor of Architecture and Drawing—54 West Tenth avenue.

DAVID STUART WHITE,

Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine—West Fifth avenue.

HERBERT OSBORN,

Professor of Zoology and Entomology—485 King avenue.

CHRISTOPHER P. LINHART,

Professor of Physical Education, and Director of the Gymnasium—The Vendome.

OLIVE B. JONES,

Librarian—58 Eleventh avenue.

HENRY CURWEN LORD,

Professor of Astronomy and Director of the Emerson McMillin Observatory—Observatory Park.

FRANK EDWIN SANBORN,

Professor and Director of the Department of Industrial Arts—303 West Eighth avenue.

FRANK ARNOLD RAY,

Professor of Mine Engineering—137 King avenue.

FREDERICK CONVERSE CLARK,

Professor of Economics and Sociology—1634 Neil avenue.

JOHN ALLEN SHAUCK,

Professor of Law—95 Winner avenue; Supreme Court Building.

CAPT. GEORGE L. CONVERSE, U. S. A. (retired),

Professor of Military Science and Tactics—94 Hoffman avenue.

(1) J. H. R. PAUL FISCHER,

Professor of Pathological Anatomy—250 Marshall avenue.

JOHN WRIGHT DECKER,

Professor of Dairying—325 West Eighth avenue.

EMBURY ASBURY HITCHCOCK,

Professor of Experimental Engineering—380 West Eighth avenue.

FRANCIS CARY CALDWELL,

Professor of Electrical Engineering—401 West Sixth avenue.

CHARLES SMITH PROSSER,

Professor of Geology—114 West Tenth avenue.

JOHN ADAMS BOWNOCKER,

Professor of Inorganic Geology and Curator of the Museum—1594 Neil avenue.

ALFRED DODGE COLE,

Professor of Physics—1662 Neil avenue.

(1) Resigned April 1, 1903.

MINNIE AVA NELLIE STONER,
Professor of Domestic Science and Head of Department of Domestic Economy—95 West
Eleventh avenue.

WILBUR HENRY SIEBERT,
Professor of European History and Secretary of the University Faculty—206 West
Tenth avenue.

CHRISTOPHER ELIAS SHERMAN,
Professor of Civil Engineering—772 Oak street.

ALBERT HENRY HELLER,
Professor of Civil Engineering—1249 Neil avenue.

CHARLES SUMNER PLUMB,
Professor of Animal Husbandry—107 West Eleventh avenue.

WILLIAM W. BOYD,
High School Visitor—29 South Monroe avenue.

GEORGE WASHINGTON McCOARD,
Associate Professor of Mathematics—232 Wilbur avenue.

CHARLES WALTER MESLOH,
Associate Professor of Germanic Languages and Literatures—University Grounds.

ARTHUR WINFRED HODGMAN,
Associate Professor of the Classic Languages—164 West Ninth avenue.

CORNELIA PORTER SOUTHER,
Associate Professor of Domestic Art—325 West Eighth avenue.

CLARA MAUDE BERRYMAN,
Director and Associate Professor of Physical Education—95 West Eleventh avenue.

WILLIAM EDWARDS HENDERSON,
Associate Professor of Chemistry—234 West Tenth avenue.

JOSEPH RUSSEL TAYLOR,
Associate Professor of English Literature—222 King avenue.

JAMES ELLSWORTH BOYD,
Associate Professor of Mathematics—69 West Maynard avenue.

CHARLES A. BRUCE,
Associate Professor of the Romance Languages—235 West Tenth avenue.

SEPTIMUS SISSON,
Associate Professor of Veterinary Medicine—124 West Fourth avenue.

THOMAS EWING FRENCH,
Associate Professor of Architecture and Drawing—1458 Worthington street.

DAVID R. MAJOR,
Associate Professor of Education—292 King avenue.

CHARLES WILLIAM FOULK,
Associate Professor of Chemistry—1656 Neil avenue.

JOHN H. SCHAFFNER,
Associate Professor of Botany—40 West Tenth avenue.

CHARLES BRADFIELD MORREY,
Associate Professor of Anatomy and Physiology—86 King avenue.

JAMES STEWART HINE,
Associate Professor of Zoology and Entomology—1340 Hunter avenue.

FRANCIS LEROY LANDACRE,
Associate Professor of Zoology and Entomology—299 West Sixth avenue.

WALLACE S. ELDEN,
Associate Professor of Classical Languages—1462 Neil avenue.

FRANK HARVEY ENO,
Associate Professor of Civil Engineering—316 West Eighth avenue.

ALFRED VIVIAN,
Associate Professor of Agricultural Chemistry—244 West Tenth avenue.

J. WARREN SMITH,
Lecturer on Meteorology—1422 Oak street.

WILLIAM LUCIUS GRAVES,
Assistant Professor of Rhetoric and English Language—1313 Forsythe avenue.

CLAIR ALBERT DYE,
Assistant Professor of Pharmacy—233 West Eleventh avenue.

CHARLES LINCOLN ARNOLD,
Assistant Professor of Mathematics—328 West Eighth avenue.

(1) KARL DALE SWARTZEL,
Assistant Professor of Mathematics—57 East Eighth avenue.

GEORGE H. McKNIGHT,
Assistant Professor of Rhetoric and English Language—312 West Seventh avenue.

FRED A. FISH,
Assistant Professor of Electrical Engineering—41 Hubbard avenue.

WILLIAM ABNER KNIGHT,
Assistant Professor of Machine Shop Practice—206 West Lane avenue.

HARRY WALDO KUHN,
Assistant Professor of Mathematics—234 West Tenth avenue.

JAMES E. HAGERTY,
Assistant Professor of Economics and Sociology—212 Tenth avenue.

THEODORE C. SMITH,
Assistant Professor of American History and Political Science—244 West Tenth avenue.

J. D. BATCHELDER,
Assistant Professor of Romance Languages—Hotel Vendome.

FREDERICK EDWARD KESTER,
Assistant Professor of Physics—1473 Nell avenue.

THOMAS HARVEY HAINES,
Assistant Professor of Philosophy—310 West Seventh avenue.

(1) ALONZO HUBERT TUTTLE
Assistant Professor of American History and Political Science—215 West Tenth avenue.

VERNON H. DAVIS,
Assistant Professor of Horticulture and Forestry—University Grounds.

OSCAR V. BRUMLEY,
Assistant Professor of Veterinary Medicine—University Grounds.

HORACE JUDD,
Assistant Professor of Experimental Engineering—245 West Fourth avenue.

EDWIN F. CODDINGTON,
Acting Assistant Professor of Mathematics—39 West Eleventh avenue.

THOMAS HERBERT DICKENSON,
Assistant Professor of Rhetoric and English Language—244 West Tenth avenue.

BURT BIDWELL HERRICK,
Instructor in Cheese Making—167 Tenth avenue.

WILLIAM HENRY RENCK,
Instructor in Pattern Making and Founding—1568 Nell avenue.

CHARLES PHILIP CROWE,
Instructor in Forging—971 Highland street.

ARTHUR ERNEST DAVIES,
Instructor in Philosophy—420 Fifteenth avenue.

(1) ALBERT EARL VINSON,
Instructor in Agricultural Chemistry—134 West Ninth avenue.

THOMAS KENYON LEWIS,
Instructor in Drawing—1337 Summit street.

SILAS MARTIN,
Instructor in Drawing—317 Fifteenth avenue.

JOSEPH HENRY VOSSKUEHLER,
Instructor in Drawing—54 West Tenth avenue.

(1) Absent on leave.

A. V. BLEININGER,

Instructor in Ceramics—116 West Ninth avenue.

BERTHOLD AUGUST EISENLOHR,

Instructor in Germanic Languages—388 West Eighth avenue.

S. E. RASOR,

Instructor in Mathematics—1594 Neil avenue.

EDWARD EVERETT SOMMERMEIER,

Instructor in Metallurgy and Mineralogy—1590 Neil avenue.

DON CARLOS HUDDLESON,

Instructor in Physical Education—450 West Seventh avenue.

MERRIT FINLEY MILLER,

Instructor in Agronomy—252 West Eighth avenue.

FRANK RUHLEN,

Instructor in Zootechny—University Grounds.

DELBERT ALONZO CROWNER,

Instructor in Butter Making—West Jefferson, Ohio.

MELVIN DRESBACH,

Instructor in Anatomy and Physiology—236 West Eighth avenue.

RUDOLPH HIRSCH,

Instructor in Agricultural Chemistry—1060 South Front street.

GEORGE WASHINGTON RIGHTMIRE,

Instructor in American History and Political Science, and in Law—1528 Worthington street.

EDGAR HOLMES McNEAL,

Instructor in European History—1340 Highland street.

EDWARD DAVENPORT HOWARD,

Instructor in Law—307 West Seventh avenue.

D. DIEDRICH BRUNING,

Instructor in Civil Engineering—786 Oak street.

HARRIET TOWNSHEND,

Assistant in Library—53 West Eleventh avenue.

MAUD DOROTHY JEFFREY,

Assistant in Library—1251 Neil avenue.

GERTRUDE STOWELL KELLCOTT,

Assistant in Library—1332 Highland avenue.

CLAUDE B. GUITTARD,

Assistant in Library—80 McMillen avenue.

WILLIAM L. DAVIES,

Assistant in Civil Engineering—47 West Eighth avenue.

SARAH TRACY BARROWS,

Assistant in Germanic Languages and Literatures—85 West Tenth avenue.

MARION WILSON MUMMA,

Assistant in Chemistry—47 West Tenth avenue.

LOUIS BRYANT TUCKERMAN, JR.,

Assistant in Physics—1451 Worthington street.

HARRY WILBUR BROWN,

Assistant in Clinic—1340 Fair avenue.

EDWARD NATHAN WEBB,

Assistant in Chemistry—144 West Ninth avenue.

HERMINE DE NAGY,

Assistant in French—1332 Highland street.

MARTHA HARTFORD,

Assistant in Library—161 West Tenth avenue.

RAYMOND JESSE SEYMOUR,

Assistant in Anatomy and Physiology—76 West Third avenue

BENJAMIN FRANKLIN MAAG,
Assistant in Astronomy—162 King avenue.

OTTO EMERY JENNINGS,
Assistant in Botany—University Grounds.

JOHN SATTERLEE TIDBALL,
Assistant in Architecture and Drawing—35 Price street.

WILLIAM C. MILLS,
Curator of Archaeology—78 West Tenth avenue.

CLARA CONVERSE EWALT,
Fellow in Rhetoric and English Language—1382 East Long street.

JAMES GLOSSBRENNER SANDERS,
Fellow in Botany—1610 Highland street.

HARRIET GRISWOLD BURR,
Fellow in Botany—1454 Highland street.

LLOYD YOST,
Fellow in Mechanical Engineering—218 West Eighth avenue.

GILBERT PENNOCK,
Fellow in Rhetoric and English Language—80 West Woodruff avenue.

ERVIN G. BAILEY,
Fellow in Experimental Engineering—47 West Tenth avenue.

OTTO H. SWEZEY,
Fellow in Zoology and Entomology—377 King avenue.

CATHERINE EMILY ANDREWS,
Fellow in Chemistry—1095 North High street.

CHARLES ETHELBERT STARLIN,
Fellow in Chemistry.

FRANK H. MIESSE,
Fellow in Economics and Sociology—201 West Eleventh avenue.

FREDERICK JOHN MUIRIE,
Fellow in Rhetoric—1574 Worthington street.

J. C. CONE,
Fellow in Library—939 Wilson avenue.

WINFRED FOREST COOVER,
Fellow in Chemistry—1456 Hunter avenue.

JAMES McOWEN,
Florist—University Grounds.

EXECUTIVE DEPARTMENT.

1902-1903

WILLIAM O. THOMPSONPresident
ALEXIS COPESecretary Board of Trustees
KATHERINE H. DUNCANExecutive Clerk
EDITH D. COCKINSRegistrar
CARL E. STEEBAccountant
EDITH R. HUBLERSecretary's Clerk and Stenographer

CHIEF ENGINEER

WILLIAM C. McCracken.

STATE GEOLOGIST

PROFESSOR EDWARD ORTON, JR.

STATE SEALER OF WEIGHTS AND MEASURES

THE PROFESSOR OF PHYSICS, *Ex-Officio*.

COLUMBUS, O., September 26, 1903.

His Excellency, HON. GEO. K. NASH, Governor of Ohio:

DEAR SIR: I have the honor to transmit herewith the thirty-third annual report of the Board of Trustees, Ohio State University.

Very respectfully.

Your obedient servant,

ALEXIS COPE, *Secretary* .

REPORT OF THE BOARD OF TRUSTEES.

OFFICE OF THE BOARD OF TRUSTEES,

OHIO STATE UNIVERSITY,

COLUMBUS, O., June 30, 1903.

HON. GEORGE K. NASH, *Governor of Ohio*:

SIR:—In compliance with law, the board of trustees respectfully submits the thirty-third annual report of the Ohio State University, it being for the year ending June 30, 1903.

ENDOWMENTS.

The part of the irreducible debt of the state which forms the principal endowment of the university at the date of the last annual report June 30, 1902, was \$562,699.94 upon which the annual interest was \$33,761.99.

Under the operations of an act of the general assembly of March 14, 1889, entitled "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," the following sums were added thereto: August 11, 1902, \$405.83; September 29, 1902, \$364.88; November 19, 1902, \$2,268.00; January 27, 1903, \$592.07; February 19, 1903, \$247.93; February 28, 1903, \$174.03; March 11, 1903, \$1,465.18; June 1, 1903, \$194.80; June 18, 1903, \$493.80. Total additions during the year \$6,206.52, making the principal endowment fund June 30, 1903, \$568,906.46, upon which the annual interest is \$34,134.38.

THE WILLIAM JENNINGS BRYAN PRIZE FUND.

The principal of the original sum of two hundred and fifty dollars which was given to the university by Hon. William Jennings Bryan in 1898, on condition that the annual interest thereon should be awarded as a prize for the best essay discussing the principles which underlie our form of government, and which was added to the irreducible debt of the state under the provisions of section 4105-15 of the revised statutes of Ohio, on June 30, 1902, was \$290.97 on which the annual interest was \$17.46.

There having been no award of such prize during the past year, under the operations of the law last above mentioned the accretions of interest have been added to the principal, making said principal sum June 30, 1903, \$308.69 on which the annual interest is \$18.52.

THE ROBINSON FELLOWSHIP IN ENGINEERING.

Mention was made in the last annual report that Professor Stillman W. Robinson had in June, 1902, offered to permanently endow a fellowship in engineering in the sum of five thousand dollars, that such offer had been accepted, and that Professor Robinson was taking time to carefully specify the qualifications of those to whom it should be awarded, the method of its award, etc. These were afterwards carefully worked out, and accepted by the board of trustees, and on the 30th of January, 1903, the said sum of \$5,000 having been paid over by Professor Robinson was covered into the state treasury in compliance with section 4105-15 of the revised statutes of Ohio.

Under the condition of the gift the annual interest on said sum and its accretions is to be paid "to some graduate engineering student who shall have shown marked interest and ingenuity in the study of some engineering problem or problems, in order to give him further opportunity for study and investigation with the understanding that he shall devote his entire time to study and research."

Under the provisions of the section last above referred to and the provisions of section 4105-47 of said revised statutes said sum of \$5,000 has been augmented by the interest accruing thereon to July 1, 1903, and now amounts to \$5,125.00 upon which the annual interest is \$307.50.

THE C. NEWTON BROWN SCHOLARSHIP FUND.

On the first day of April, 1903, Mr. L. F. Kiesewetter, an alumnus of the university, appeared before the board of trustees and represented that the alumni were desirous of raising a fund for the endowment of a scholarship as a memorial to the late C. Newton Brown, late professor of civil engineering, that about \$1,000 had already been raised and that they wished to pay over said sum to the trustees to be held until other donations and accrued interest should amount to a sum sufficient for such endowment.

Said offer was accepted and afterwards, May 18, 1903, the sum of \$1,000 was received and paid into the state treasury in accordance with the provisions of law before cited.

RECEIPTS AND DISBURSEMENTS.

The receipts and disbursements for the year ending June 30, 1903, were as follows:

RECEIPTS.

Balance in treasury June 30, 1902.....	\$ 13,830 71	
Interest on endowment	34,070 91	✓
State levy	229,463 11	✓
State building levy	113,203 46	✓
Sale of refunding bonds	43,672 00	
Appropriation act of congress, 1890	25,000 00	
Rents	2,011 50	
Students' fees	41,000 00	
Sale store room cards and supplies.....	5,719 78	
Diploma fees	945 00	
Lake laboratory fees	380 00	
Veterinary clinic	1,114 64	
Graduate school of agriculture	307 95	
Summer shop work	918 49	
Siebert library	200 00	
Emerson McMillin fellowship in astronomy	150 00	
Emerson McMillin fellowship in economics	187 50	
National Brick Manufacturer's scholarship	250 00	
Rents from Page lands	27,711 74	
Robinson fellowship	5,000 00	
C. Newton Brown scholarship	1,000 00	
Miscellaneous receipts	798 25	
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		\$546,935 04

DISBURSEMENTS.

Bonds and interest	\$ 77,487 50	
Salaries instruction	175,434 27	-
Salaries administration	35,155 04	
Expenses of trustees	417 63	
Repairs buildings	5,549 18	
Repairs, heat, light and power plant	4,500 67	
Fuel	17,613 04	
Gas	1,491 58	
Water	2,664 50	
Roads and grounds	3,374 57	
Advertising	1,134 87	
Printing bulletins, etc.	2,968 94	
Blanks, blank books, circulars and stationery.....	1,893 35	
Postage	756 48	
Furniture, cases and shelving	3,292 01	
Rent fire alarm and signal boxes	516 54	
Telephone service	589 69	
Telegrams	20 66	
Messenger and guide service	319 37	
Oils	201 19	
General supplies, cleaning materials, etc.	146 15	
Freight and cartage	719 10	

Commencement expenses	719 62	
Insurance	12 35	
Instruments and apparatus	12,433 20	
Laboratory supplies	16,609 28	
Veterinary clinic	510 65	
Library books	3,969 81	
Library binding	634 19	
Library supplies	618 76	
Books not out of library funds	1,260 84	
Attorney fees Virginia Military lands case	1,125 00	
N. B. M. A. scholarship	168 85	
Emerson McMillin fellowships	240 00	
Extra clerks	101 52	
Expenses high school visitor	656 75	
Parts store room cards refunded	1,074 48	
Typewriting machines	143 75	
Outhwaite collection Works on Civil War	2 25	
Extra janitor service	26 00	
Extra watchman service	36 00	
Arithmometer	375 00	
Examination paper	222 00	
Veterinary clinic	510 65	
Student labor in departments	2,245 80	
Agricultural Students' Union	180 64	
Judgment of M. & M. National Bank	7,066 05	
Attorney fees Page will case	15,137 33	
Graduate School of Agriculture	3,625 37	
Removal of residence	2,082 92	
C. Newton Brown scholarship	1,000 00	
Robinson fellowship	5,000 00	
Law building	42,266 84	
Equipment law building	4,526 48	
Additions to power plant	1,348 00	
Addition to chemical building	17,573 49	
Water purification	2,512 68	
Plans for physics building	2,500 00	
Veterinary building	23,971 42	
Engineering building	23,832 30	
Additions to observatory	2,900 00	
Changing steam pipes, armory	1,502 97	
New boilers	2,253 64	
Miscellaneous	116 15	
		\$540,024 66
Balance in treasury June 30, 1903		6,910 28

The treasurer's report filed herewith contains a complete statement of said receipts and disbursements giving each item in detail.

RECEIPTS AND DISBURSEMENTS.

FARM.

The professor of agriculture has entire charge of that portion of the grounds devoted to farm crops and experiments and also of the dairy.

He receives and disburses all moneys arising from sales of farm and dairy products and submits his books of account and vouchers for each month for inspection by the board of trustees.

Such receipts from sales of farm and dairy products for year ending June 30, 1903, were	\$13,245 17
Disbursements	11,712 17
Balance June 30, 1903	\$1,533 00

RECEIPTS AND DISBURSEMENTS.

HORTICULTURAL GARDENS.

The same plan prevails in regard to the portion of the grounds used by the professor of horticulture for experiments in the production of fruit and garden crops. During the year ending June 30, 1903, the receipts from sales of such products were.....	\$1,547 24
Disbursements	1,851 72
Deficiency to be provided for.....	\$304 48

THE VIRGINIA MILITARY LANDS.

On June 30, 1902, the total receipts from sales of the Virginia Military lands granted to the University by act of the general assembly of March 26, 1872, were	\$65,565 28
The receipts from this source for the year ending June 30, 1903, were	6 00
	<hr/> \$65,571 28
The expenses incident to the survey and disposition of said lands to June 30, 1902, were.....	\$29,248 85
Such expenses for year ending June 30, 1903, were.....	29,248 85
	<hr/>
Leaving net cash receipts to June 30, 1903.....	36,322 43
Of this sum there has been paid into the state treasury to the credit of the endowment fund.....	\$13,665 14
And expended for building and maintaining residences for the professors under act of April 17, 1882. the sum.....	22,637 57
	<hr/> \$36,302 71
Leaving balance June 30, 1903.....	19 72

The receipts and disbursements of this fund are included in the general statement of the aggregate receipts and disbursements.

ADDITIONS TO GENERAL ENDOWMENT.

To June 30, 1902, the additions to the general endowment under operations of an act of the general assembly passed March 14, 1889, entitled, "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," an act passed April 21, 1893, entitled, "An act for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio, an act amendatory of said last mentioned act passed April 21, 1894; an act passed April 28, 1898, entitled "An act making

appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio"; and an act passed April 10, 1900, entitled "An act making appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," were \$24,858.50.

During the year ending June 30, 1903, under the operations of said first mentioned act there was added to said general endowment the sum of \$6,206.52 making the total additions to the general endowment under these several acts \$31,065.02.

NEW MORRILL FUND.

The following are the receipts and disbursements for the year ending June 30, 1903, of the appropriations made by act of congress of August 30, 1890, and known as the "New Morrill Fund."

RECEIPTS

Balance in treasury June 30, 1902.....	\$ 122 14
Appropriations for year ending June 30, 1903.....	25,000 00
	<hr/> \$25,122 14

DISBURSEMENTS.

For instruction and facilities in agriculture	\$4,276 66
For instruction and facilities in mechanic arts	6,465 00
For instruction and facilities in English language	1,940 00
For instruction and facilities in mathematical science	2,410 00
For instruction and facilities in natural or physical science..	8,593 33
For instruction and facilities in economic science..*.....	1,240 00
	<hr/> \$24,929 99
Balance in treasury June 30, 1903	192 15

Said receipts and disbursements are included in the preceding general statement of aggregate receipts and disbursements.

The act of congress making this appropriation requires a detailed statement of the receipts and expenditures of this fund, showing specifically the purposes to which it has been applied, which report for the year ending June 30, 1903, is appended to the report of the treasurer filed herewith.

BONDED INDEBTEDNESS.

The bonded indebtedness of the university June 30, 1902, was \$280,000, due and payable as follows: \$55,000, December 1, 1902; \$10,000, June 1, 1903; \$55,000, December 1, 1903; \$10,000, June 1, 1904; \$15,000, December 1, 1904; \$10,000, June 1, 1905; \$15,000, December 1, 1905; \$25,000, December 1, 1906; \$25,000, December 1, 1907; \$25,000, December 1, 1908; \$25,000, December 1, 1909; \$10,000, December 1, 1910.

Of this indebtedness \$30,000 bore interest at 6% and \$250,000 at 4½% per annum payable semi-annually.

Under and pursuant to the provisions of an act of the general assembly entitled "An act to authorize the board of trustees of the Ohio State University to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due," passed April 23, 1898, \$30,000 of the 4½% certificates of indebtedness falling due December 1, 1902, were taken up by an issue of the same amount of 4½% refunding bonds falling due, \$15,000 December 1, 1900, and \$15,000 December 1, 1911. Said refunding bonds brought a premium of \$2,750.00.

Under provisions of the same act the \$10,000 of 6% certificates falling due June 30, 1903, were also taken up by an issue of the same amount of 4½% refunding bonds falling due December 1, 1911. Said issue of refunding bonds brought a premium of \$922.00.

The premiums received in these transactions reduce the interest on the bonds so refunded to about 3¼%.

Said reductions of principal and interest left the bonded indebtedness June 30, 1903, \$255,000, of which \$20,000 bears interest at 6% and \$235,000 at 4½% per annum payable semi-annually.

Said remaining indebtedness falls due as follows: \$55,000, December 1, 1903; \$10,000, June 1, 1904; \$15,000, December 1, 1904; \$10,000, June 1, 1905; \$15,000, December 1, 1905; \$25,000, December 1, 1906; \$25,000, December 1, 1907; \$25,000, December 1, 1908; \$25,000, December 1, 1909; \$25,000, December 1, 1910; \$25,000, December 1, 1911.

ADDITIONS TO HEAT, LIGHT AND POWER PLANT.

In the last annual report mention was made of the fact that it had become necessary to add an additional generator and engine to the power plant in order to provide the additional light and power required in the proposed new buildings. Later it was also found necessary to increase the boiler capacity. As there was not room in the present boiler house for an additional battery large enough to supply the additional heating service necessary, it was decided to remove a battery of two 100 H. P. boilers and install in its place a battery of 450 H. P. This has been done and the boilers will be installed ready for use in a few days.

The new boilers introduced were the Babcock-Wilcox type underneath which are placed Murphy Smoke Consuming furnaces. This addition to the heating plant was made at the cost of \$7,900.

ADDITION TO THE CHEMICAL BUILDING.

The rapidly increasing numbers of students has caused no greater congestion in any department than in that of chemistry. Relief has been sought by fitting up rooms outside the chemical laboratory for laboratory work of students who could not be furnished laboratory space in the chemical building, but even these were insufficient to provide in a suitable manner for their accommodation. Early in the present year Professor

McPherson and his assistants worked out a scheme for an addition to the present chemical building which would practically double its capacity, and it was decided to build a portion of such addition immediately.

For the portion of such addition which it was decided to build, an appropriation of \$20,000 was made by the board of trustees. Plans, specifications and estimates therefor were made by Professor J. N. Bradford, approved by the governor, auditor of state and secretary of state, due advertisement was made and on the 26th day of September, 1902, the contract for such addition was let to D. W. McGrath, Columbus, Ohio, for the sum of \$18,320.

The building has been completed, properly equipped with laboratory desks and apparatus and will be ready for use at the beginning of the next term.

The addition to chemical hall consists of a two story and basement wing, added to the north wing of the present structure, 57 feet 10 inches x 70 feet 5 inches and the remodeling of the north wing of the present building which is 40 feet x 63 feet.

The new wing contains about 4,124 square feet of floor to each story.

The materials and construction conform to that of the main structure. The basement walls are of Delaware limestone, rubble masonry laid in cement mortar. The face wall above grade is of dark red pressed brick laid in red tinted lime mortar backed with local commercial brick laid with neat struck joints on the inside, and painted white. At grade there is a 12 inch course of range work of cut limestone. Brown rock-faced sand-stone is used for belt course and window trim. All inside partitions are of beaded ceiling painted white. The ceilings are finished in the same manner. The floors are double and are of double edge grain pine laid with paper between the two divisions and are supported on wood joists. The joists in turn are carried on built up girders resting on pine posts. All windows are glazed with A. D. S. blown glass. The roof is covered with unfading green slate.

The basement story will be used for industrial chemistry; the first floor will provide a laboratory for work in quantitative chemistry, laboratory for physical chemistry, balance room, instructors offices, instructors laboratories, a preparation room, recitation room, reading room, the necessary corridors and stairway; the second floor contains laboratories for the freshman classes in qualitative chemistry, instructors room, balance room and necessary corridors.

In order to keep the air of the rooms from becoming contaminated with chemical fumes and vapors, the ventilation is made positive by the use of two large fans located in the basement, one a plenum fan for blowing the air of the required temperature into and the other an exhaust fan connected with all the hoods to draw the air out of the rooms. The temperature of the rooms is automatically controlled by the Johnson system of temperature regulation, (the air is completely changed in each room

every twelve minutes). The artificial illumination is by incandescent electric lamps carried on cleat wiring. All plumbing is of modern exposed type.

VETERINARY BUILDING.

In June, 1902, it was decided to use a portion of the state levy set apart for buildings and improvements, for the erection of a veterinary building and the sum of \$25,000 was appropriated for that purpose. This appropriation was afterwards increased to \$35,000, and plans, specifications and estimates for the structure were prepared by the engineering faculty. Said plans, specifications and estimates were approved by the governor, auditor of state and secretary of state; due notice was given as required by law and on the 26th day of September, 1902, the contract for said building was awarded to James Westwater & Co., Columbus, Ohio, at their bid of \$31,600.

The building is enclosed and will also be ready for use at the beginning of the next term.

The general shape of this building is that of the letter T, the dimensions of which are as follows: the front part of the structure forming the head of the letter is 42 feet 10 inches x 96 feet 8 inches; the part forming the stem of the letter is 28 feet x 41 feet 6 inches, and the part forming the base of the letter is 34 feet 10 inches x 65 feet 10 inches. Its extreme north and south dimension is 96 feet 8 inches, its extreme east and west dimension is 105 feet 8 inches. The basement and first floor cover 7,390 square feet, the second floor covers 4,150 square feet.

The front part of the structure is two stories in height the rear being only one story. A high basement story almost above grade is under the entire structure.

The foundation walls up to grade are built of hard burned shale street paving brick laid in Portland cement mortar resting on broken stone and Portland cement concrete footing. At the grade line is a twelve inch belt course of rock-faced Bedford limestone, which forms the sill course for the basement windows. Above this the basement wall is finished with gray speckled pressed brick with every sixth course recessed one inch. This gives the basement walls a "blocked" appearance. At the top of the basement walls is a "tooled" water table of Bedford limestone twelve inches deep. Above the water table the walls are finished with smooth light gray pressed brick. The windows are numerous and large and have "tooled" Bedford limestone caps and sills.

The front entrance is of carved Bedford limestone of Tuscan design. The roof is of wood covered with black Bangor roofing slate. The interior walls of the building are plastered except where enamel bricks are used and in the clinic rooms in the basement. Rock-wall plaster finished white is used on first and second floors with sand finish in the basement. The interior woodwork is hard pine. The front windows are glazed with American plate glass, the remainder of the building with A. D. S. com-

mon glass. All floors except basement corridors and dissecting room, which are cement, are double pine floors with a layer of felt between; all floors are carried on pine joists which rest on brick walls and steel girders.

The building was designed and erected for the departments of veterinary medicine and bacteriology. The basement story contains a pharmacology laboratory; bacteriological preparation laboratory, animal experiment room, clinic laboratory, heating and ventilating apparatus, office, janitor's room and toilet room. The first floor contains a museum, reading room, small lecture room, dissecting laboratory, amphitheatre lecture room, four offices, dark room, chart room, toilet room, corridors and stairway. The dissecting room has a cement floor and the walls are faced with enameled brick eight feet high which contributes to its sanitary condition; this room is also provided with a large skylight. The second floor contains a pathological laboratory, bacteriological laboratory, two incubator rooms, two private laboratories for the instructors, and office and corridors.

The heating and ventilation is secured by a plenum fan of the B. F. Sturtevant Co.'s make controlled by the Johnson system of temperature regulation, each room being supplied with a complete change of air every ten minutes. The artificial lighting is by incandescent electric lamps carried partly on cleats and partly in conduits. All plumbing is the modern exposed type.

ENGINEERING BUILDING.

It will also be remembered that in June, 1902, the board of trustees in making distribution of that part of the state levy which it was proposed to use for buildings and improvements, made an appropriation of \$80,000 for an engineering building planned to cost when completed the sum of \$120,000. The engineering faculty, working under the direction of the late Professor C. Newton Brown had worked out a scheme of three buildings which it was thought would provide permanently for the work of the engineering college. One building was intended to accommodate the departments of civil engineering and architecture and drawing, another the departments of mechanical and electrical engineering, and a third, the departments of metallurgy and mineralogy, mine engineering and ceramics.

It was decided to erect the first named of these buildings, the one designed to accommodate the departments of civil engineering and architecture and drawing, and the engineering faculty were directed to prepare plans, specifications and estimates therefor. Plans, specifications and estimates were prepared accordingly, approved by the governor, auditor of state and secretary of state; due advertisement was made and on the 11th day of March, 1903, the contract therefor was let to D. W. McGrath, of Columbus, Ohio, at his bid of \$73,883.

Work on this structure was begun March 16th, 1903, and it is expected to have the building ready for occupancy at the beginning of the next term.

This building is practically a three story brick structure consisting of a high basement story above grade with two stories above. It has a front 217 feet 8 inches in length facing south with two lateral wings 70 feet wide; one extending back from the front 63 feet 2 inches, the other 89 feet 10 inches. It is so arranged that it may have three wings extending back, as future demands may require, which will give the building the general shape of the letter E.

Each story contains about 14,000 square feet of floor space. The foundation walls are of Delaware limestone laid in Portland cement mortar on sand and broken stone concrete footings varying from eighteen inches to five feet thick and from two feet to seven feet wide.

At the grade line is a fourteen inch range course of rock-face Bedford limestone which forms the sill belt for the first or ground floor. Above this rock-face course the walls are of dark speckled brick, with every sixth course recessed one inch. At the top of the first story is a fourteen inch "fine tooled" dressed blue Bedford limestone belt course. Above this the wall is built of smooth light gray brick, with window trim, pilasters and brick part of entablature of dark gray brick, laid in red mortar. The main entrance is of Bedford limestone and consists of a flaring flight of steps in two runs. At the platform are two electric light posts each carrying a five cluster lamp of an architectural design to correspond with the architecture of the building. At the top of the steps is a projecting stone portico carried by two pilasters and two fluted columns.

The vestibule is wainscoted with marble and the floor is of tile. The top of the exterior walls is finished with a terra cotta cornice three feet deep and projecting three feet from the wall, the cornice gutter is lined with heavy copper. The roof is of wood covered with red American S. tile. All the inside walls are plastered with white hard finished rock plaster. The woodwork of the first and second stories is antique oak, that of the basement hard pine. All doors opening from the halls into the drawing rooms are swinging double doors with large panels of bevel glass. All office and recitation room doors have large panels of Florentine glass. All floors are double stripped pine floors, the space between the two strips being utilized for electric wiring and gas pipes. All windows of the front and sides of the building are glazed with American plate glass, all other windows are with A. D. S. blown glass.

The building provides accommodations for the departments of architecture and drawing and civil engineering. The ground floor contains a cement laboratory, stereotomy laboratory, instrument room and camp storage room for the department of civil engineering; photographic laboratory and dark room, blue-print room, and architectural laboratory for the

department of architecture and drawing, together with a lecture room, janitor's room, toilet room and the heating and ventilating plant.

The west end of the first floor contains offices for the department of architecture with a lecture room and two architectural drawing rooms; the east end, the offices of the civil engineering department with a lecture room and two drawing rooms.

The second floor, west end, contains four mechanical drawing rooms, a lecture room, a preparation room, and an instructors room for the department of architecture and drawing; the east end, a civil engineering lecture room; drawing room, two offices and a thesis room.

The architectural style of this building is the Renaissance, the details of decoration being Ionic.

The heating and ventilation is by two Buffalo Forge Company's plenum fans driven by an electric motor and supplied with steam for heating from the university power plant. The system is controled by the Johnson system of temperature regulation and the Johnson humidistat. The artificial lighting is by incandescent electric lights and Nernst glow lamps carried on concealed conduit wiring. All plumbing is of modern exposed type.

LAKE LABORATORY BUILDING.

For a number of years the university has used for a lake laboratory a portion of the building at Sandusky used by the state fish and game commission as a fish hatchery. The work of said laboratory has increased to such an extent that it was found necessary to provide other and commodious quarters and early in the year steps were taken to secure a proper site for a building to be solely under the control of the trustees of the university.

At the instance of the Hon. W. E. Guerin, Jr., an officer of the Cedar Point Pleasure Resort Co., said company offered a lease of a tract of land on Cedar Point, 400 feet by 150 feet with such additions which may be needed hereafter, for the term of fifty years with the privilege of renewal for another fifty years, for the consideration of \$1.00,—conditioned that the university should erect and maintain a lake laboratory thereon devoted to the work which had been carried on at the building of the state fish and game commission.

The site offered was inspected by the board of trustees and Professors Osborn and Kellerman and was finally accepted and the lease therefor was duly executed and recorded.

Following this action plans, specifications and estimates for a building for such laboratory, the cost not to exceed \$2,500, were prepared by Professor J. N. Bradford, and the contract for its construction was awarded to Mr. George Feick, of Sandusky, Ohio, for the sum of \$2,500.

The building will be completed and ready for occupancy during the coming summer.

The funds for this improvement were also taken from that portion of the state levy which was set apart for buildings and improvements.

ADDITIONS TO OBSERVATORY.

In July, 1902, Professor Henry C. Lord, director of the Emerson McMillin Observatory, laid before the board of trustees plans, drawings, specifications and estimates for certain additions to said observatory which were necessary to enlarge and make more satisfactory the work in geodetic astronomy. The necessity for such additions being apparent the sum of \$2,900, was appropriated therefor and shortly afterwards contracts were let for the work.

The additions were completed and ready for use during the fall term 1902.

A little later the sum of \$2,900 was appropriated for additional equipment.

These appropriations were applied to the enlargement of the present building so as to provide a well lighted lecture room, two observing rooms, a theodolite house, a new heating plant, a laboratory and instrument shop, and the purchase of a zenith telescope, theodolites and other instruments and apparatus. In addition to this about \$300 was applied towards the equipment of a spectroscopic laboratory.

The instruments and apparatus were in place about December 1, 1902, and have been in use since that time.

These additions to the observatory and its equipment afford facilities for instruction in geodetic astronomy not excelled in any other institution in the country.

OTHER IMPROVEMENTS.

Among other improvements made during the year have been the erection of a plant for purifying water to be used in the boilers which was made at a cost of \$2,512.68, and changing the steam pipes in the armory and gymnasium at a cost of \$1,502.97.

PHYSICS BUILDING.

The trustees are able to report that plans for a building for the department of physics have been practically matured. Said plans provide for a structure which will cost when completed about \$120,000, that portion to be erected immediately to cost not to exceed \$80,000. It is hoped that the contract for said structure can be awarded and the foundations erected during the present building season.

THE CAMPUS.

There has been expended during the past year on the campus the sum of \$3,374.57. The greater part of this has been used in constructing an improved roadway and laying cement walks about the law and biological buildings. The remaining portion of the funds was used in mowing the grass and keeping the walks and drives in order and planting a few additional trees and shrubs.

It became necessary during the course of the year to remove the residence on the grounds just in front of the law building in order to give an unobstructed view from said building. Such residence was removed to the orchard just north of the president's residence at an expense of \$2,082.92.

It will be necessary to construct new drives and walks in front of the newly erected buildings and this will require a much larger expenditure for this purpose during the next year.

THE TOWER CLOCK.

The class of 1903 wishing to leave something of permanent value to the university as a memorial of their student days, raised among themselves the sum of \$300 for a clock to be placed in the tower of University Hall. The trustees responding to this generous sentiment and wishing to give encouragement to future classes to do likewise, appropriated a sum sufficient to pay for the mounting of the clock. It was duly installed and was formally presented to the university by the class at commencement time. It is regulated from the Emerson McMillin Observatory and publishes the correct time to all departments of the university.

INDEPENDENT WATER SUPPLY.

The university for a great many years has obtained its water from the city of Columbus, paying the same rates and charges as other consumers. Such charges for the year ending June 30, 1897, were \$593.41; during the year ending June 30, 1900, they had increased to \$1,219.77; the year ending June 30, 1901, they were \$1,316.39, and for the year ending June 30, 1902, increased consumption and increased rates brought them up to \$1,847.24. With this condition confronting them, the board of trustees, early in November, 1902, took steps toward ascertaining the practicability of an independent water supply. A committee consisting of university experts with Professor Frank A. Ray as chairman, was appointed to investigate the subject and make report to the board. The following month said committee submitted an exhaustive report discussing the various supposed sources of supply and recommending that an appropriation of \$800 be made to be used in sinking one or more deep wells,

and if the water was found in sufficient quantity, in making the necessary chemical and bacteriological tests as to its quality and freedom from contamination.

Said appropriation was made and under the immediate direction of Professor Ray and Chief Engineer McCracken two wells have been sunk to depths respectively of 93 feet and 175 feet and water obtained apparently sufficient to supply present needs.

The wells have been pumped continuously for periods of $22\frac{1}{2}$ days and each has yielded about 8,000 gallons per hour with little apparent decrease of the level in the wells.

Chemical and bacteriological tests of the water have been made covering the same periods and it has been found to be absolutely pure and apparently safe from contamination.

The water in both wells is very hard and contains some sulphur. It is unfit for use in the boilers but for ordinary purposes is believed to be unobjectionable.

Water for the boilers has been obtained for some time from shallow wells and it is quite likely that this practice will be continued even if deep wells are used for the general supply.

Sufficient tests, however, of quantity and quality of the water in the shallow wells has been made by the above named committee to show that the university can obtain an adequate supply of water from either deep or shallow wells. In case of the latter, frequent examinations would be required to surely guard against danger of contamination, and finally perhaps a system of filtration would have to be provided.

The committee will submit plans and estimates for a plant for pumping, storing and distributing the water. Until such plans are submitted the cost of such plant cannot be accurately estimated, but there is reason to believe that there will be great economy in its installation.

It will be noted that the amount paid for water during the year ending June 30, 1903, was \$2,664.50. This fact gives additional emphasis to the necessity for an independent water supply.

. SPUR TO HOCKING VALLEY RAILROAD.

The consumption of coal by the university is rapidly increasing. The amount used during the year ending June 30, 1903, was 8,146 tons against 6,918 tons the year before.

The additional new buildings to be heated and lighted during the next year will probably swell the consumption to between 9,000 and 10,000 tons. The long haul to the university from the yards in the city adds about 25c per ton to the cost. The aggregate of this addition to the cost already amounts to over \$2,000 per year and this sum will be materially augmented in coming years. These facts have led to the inquiry whether it is not time to consider building a branch railroad or spur from the uni-

versity coal sheds to one of the railroad tracks either east or west of the university in order to save a portion at least of the cost of hauling.

In order to get facts upon which to base affirmative action the trustees have appointed a committee to make inquiry and report on the cost of such a railroad or spur from the heating and power plant to the Hocking Valley Railroad about one mile west of such plant.

In 1898, Messrs. A. J. Wise, C. L. Barnaby, J. W. Groves and H. H. Barrows, students in civil engineering, made this project the subject of their joint graduating thesis and in 1902, Messrs. Louis Verne Conrad and Lloyd C. Britton of the graduating class that year did the same.

The estimates by the former students were for a modern built railroad completely ballasted with a modern two span steel bridge over the Olentangy,—the track properly fenced,—with cattle guards, road crossings, etc., etc., and amounted to the sum of \$31,172.66. The estimates made by the latter, those of the graduating class of 1902, were for a spur crossing the Olentangy river on a wooden tressel, omitting the rails, the stone ballasting and a number of other items included in the former estimate. The estimated cost of this track with the omissions above named was \$11,355. From these estimates and rough computations made by others it is probable that a suitable road could be constructed for the sum of \$25,000. If such is the case, it is apparent that it would be wise economy on the part of the university to build it, as the interest on the investment would be far less than the saving on the price of coal. Such a railroad would not only enable the university to get its coal much cheaper but would also lessen the cost of other heavy freight. It could also be used for engine testing and other experimental work of value to engineering students. As the bulk of the university coal is carried over the Hocking Valley Railroad it is possible that such road might bear a portion of the expense.

THE PAGE WILL CASES.

In the last annual report it was stated that the suit pending in the circuit court in Illinois, whereby it was sought to set aside the devise to the university in the will of the late Henry F. Page of about 1,000 acres of land in that state, had been decided in favor of the university, and that John G. Haas, receiver and trustee under the will, had formally surrendered to the university possession of said lands and had agreed to pay over the rents and profits in his hands.

On the second day of July, 1902, said John G. Haas paid over to the university the sum of \$12,626.30 of the rents and profits received by him from said Illinois lands and was appointed agent of the university to manage said lands until the final determination of the suit by the supreme court of said state.

On January, 1903, the suit pending the circuit court of Pickaway county involving the lands in Ohio devised to the university in said will,

was also decided in favor of the university, and said John G. Haas, who was also receiver in this case, was directed to surrender possession of the lands and pay over to the university the rents and profits in his hands as such receiver in accordance with the judgment of said court. On the 4th day of February, 1903, said John G. Haas, receiver, formally surrendered possession of said lands to the university and paid over the sum of \$15,085.44, the amount found in his hands as such receiver, and was appointed by the trustees, agent of the university to manage said lands until the final decision of this suit.

These cases have both been carried to the supreme courts respectively of the states above named.

The case pending in the United States court of appeals involving the same questions as to the Ohio land has been tried in that court and is now pending in the United States supreme court on a question of jurisdiction. In the meantime the entire amount received from the rents and profits of said lands has been invested until said cases are finally disposed of.

JUDGMENT OF THE MERCHANTS' AND MANUFACTURERS' NATIONAL BANK.

When the Columbus Construction Company abandoned work on the buildings known as Townshend Hall, Biological Hall and the Armory and Gymnasium they gave a chattel mortgage to the Merchants' and Manufacturers' National Bank of Columbus, Ohio, covering the material remaining on the ground at these buildings. Fifty per cent. had already been paid on much of this material and some of it had been paid for in full. When, therefore, the mortgagee undertook to take possession of such material the university authorities refused to recognize its authority to do so. The material was afterwards used in the completion of the buildings, and the contractors were given credit for the portion not already paid for. The Merchants' and Manufacturers' National Bank afterwards filed a suit to foreclose such mortgage.

The suit was tried in the common pleas and circuit courts of Franklin County and was decided against the university. The case was carried to the supreme court which decided that under the act known as the Royer law it had no jurisdiction to hear and give final judgment in the case. The judgment of the common pleas court therefore had to be accepted as final. The amount including interest was \$7,066.55 and was paid to the Merchants' and Manufacturers' National Bank, May 7, 1903.

The university in this case may have recourse against the contractor and his bondsmen for the amount of the judgment, and the attorney general will doubtless see that its interests are protected in the suit pending against them.

LIBRARY.

The expenditures for the library for the year ending June 30, 1903, exclusive of the salaries of the librarian and regular assistants were

\$5,876.17. Of this sum there was paid for furniture, cases and shelving, \$168.56; for binding, \$634.19; for current supplies, \$450.20; for student assistance, \$653.41, and for books, \$3,969.81.

The number of books in the library June 30, 1902, was 44,523. The librarians report which is filed herewith shows that there was added during the year 3,700, making the total number June 30, 1903, 48,223. Of the books added during the year, 1,492 were purchased, 2,188 were received by gift and 20 secured by exchange.

Besides the expenditures for books above named there was expended by the several departments for books required for reference in current work the sum of \$1,260.84. These books are not included in the librarian's report.

During the past year an order was made making all books belonging to the several departments a part of the general library under the general control of the librarian. In accordance with this order the report of the librarian hereafter will show the actual number of volumes owned by the university. This number may be set down at present at 50,000 volumes. It may be a few more or a few less than this number.

During the year an important gift of books was received from Hon. Albert White, Governor of West Virginia, who presented to the university the pedagogical library of his father, the late Hon. Emerson E. White, of Columbus, Ohio.

Another important gift was that of Mrs. Eliza Haines, of Waynesville, Ohio, who through the interest of Mr. John J. Janney, of Columbus, Ohio, gave to the university the library of her late husband, several hundred volumes.

Due acknowledgment is hereby made of these important and valuable gifts.

The Hon. J. H. Outhwaite is still adding to the Outhwaite collection of Works on the Civil War, and Messrs. John and Louis Siebert, of Columbus, Ohio, during the year donated the sum of \$200 for the purchase of additional books for the Siebert Library of German History.

The board of trustees calls attention to the paragraph in the librarian's report in regard to the new library building. They concur in opinion that when such a building is begun it shall be ample for present and future needs.

GIFTS DURING THE YEAR.

Among the important gifts received during the year were that of Emeritus Professor Stillman W. Robinson of \$5,000 for the endowment of a fellowship in engineering, promise of which was mentioned in the last annual report; that of \$1,000 contributed by the engineering students towards a scholarship as a memorial to the late Professor C. Newton Brown; the sum of \$250 for the maintenance of a scholarship in the school of ceramics which is made annually by the National Brick Manufacturer's Association; the sum of \$337.50 contributed by Mr. Emerson

McMillin for the support of fellowships in astronomy and economics; and the sum of \$200 contributed by John and Lewis Siebert for the purchase of books for the Siebert collection of works on German history.

Besides these gifts of money, the library and the various collections in the university were enriched by donations of books and collections of specimens of various kinds.

A list of the gifts to the library is given in the librarian's report. Those to the various collections above mentioned were as follows:

DEPARTMENT OF AGRICULTURAL CHEMISTRY.

A bundle of sugar cane from H. W. Wiley, Washington, D. C., value \$4.00.

DEPARTMENT OF ASTRONOMY.

The gift of a heliostat to the Emerson McMillin Observatory by Julius F. Stone, of Columbus, Ohio.

DEPARTMENT OF BOTANY.

201 herbarium specimens from S. G. Horlocker, Dayton, Ohio.

67 herbarium specimens from A. Wetz & Son, St. Marys, Ohio.

93 herbarium specimens from F. H. Burgelhaus, Summer, Washington.

33 herbarium specimens from C. P. Ingold, Sabina, Ohio.

16 herbarium specimens from Edward Claassen, Cleveland, Ohio.

67 herbarium specimens from Otto Hacker, Painesville, Ohio.

21 herbarium specimens from Professor E. L. Mosley, Sandusky, Ohio.

DEPARTMENT OF CHEMISTRY.

Set of specimens illustrating the manufacture of soap donated by Proctor & Gamble, of Cincinnati, Ohio.

DEPARTMENT OF CIVIL ENGINEERING.

25 maps of the northern boundary of the United States donated by Professor S. C. Derby; a Miller Flush Tank model by the Pacific Flush Tank Co., of Chicago, Ill.; "Puentes De Hierro," two vols., from Captain Ysidro Soler Brunet; reports, catalogues and circulars from various sources.

DEPARTMENT OF DOMESTIC SCIENCE.

Johnson's Food Cabinet, valued at \$2.00.

DEPARTMENT OF ELECTRICAL ENGINEERING.

From the Ohio Brass Co., all wire rail bonds; rail bonds from the following: Protected Rail Bond Co., General Electric Co., Albert and J. M. Manufacturing Co., Lyman Pneumatic Signal Co., Morris Electric

Co., Harold P. Brown; from the Bullock Manufacturing Co., two framed pictures; from the Electric Storage Battery Co., sample board of battery plates; from Pass & Seymour sample board of their specialties; John A. Roebling's Sons Co., two sample boards of wire, wire bonds, etc.; Crouse Hind Electric Co., samples of conduit receptacles, fuseless rosettes and fixture rosettes and one headlight; from the General Electric Co., one headlight lamp; from W. W. Mathews & Brother, two Stombaugh Guy Anchors and wrench.

DEPARTMENT OF GEOLOGY.

Several specimens of rocks and other additions to the collections in the Geological Museum.

DEPARTMENT OF HORTICULTURE AND FORESTRY.

From the Ohio Experiment Station a collection of fruit for laboratory use; from Hattie F. Dun a collection of 125 species of the native woods of Japan.

DEPARTMENT OF INDUSTRIAL ARTS.

From the Crucible Steel Co., one sample piece of Rex High Speed Steel.

DEPARTMENT OF MECHANICAL ENGINEERING.

From Columbia Lock Nut Co., New York City, The National Elastic Nut Co., of Milwaukee and the Spiral Nut Lock Co. of New York City, collections of lock nuts; from the Federal Manufacturing Co., of Milwaukee, a hercules belt pulley with wooden frame and iron rim and samples of clinch nails; from the Link Belt Machinery Co., of Chicago, Ill., pieces of the Renold silent drive chain with spur gears, also pieces of same chain in a model; from Monongahela Iron and Steel Co., Pittsburg, Pa., sample of the Carter Ball Bearing chain; from the Morse Chain Co., of Trumansburg, N. Y., pieces of the Morse Rocker Joint chain with wall hanger model; from the Power Specialty Co., of New York City, sample of brass valve; from the Standard Roller Bearing Co., of Philadelphia, Pa., a demonstration model showing the relative frictional resistances of cylindrical bearings with and without rollers and a similar model showing the frictional resistances of ball bearings and plain thrust bearings; from the Foos Gas Engine Co., Springfield, Ohio, the loan of a 7 horse-power gas and gasoline engine; from the Babcock and Wilcox Co., copies of "Steam" and "Marine Steam" for distribution to 4th year students; from the Dodge Manufacturing Co., Mishawaka, Ind., copies of "Power and Transmission"; from the Lukenheimer Co., of Cincinnati, Ohio, copies of their catalogue and slide valve diagrams for distribution to 4th year students; from the Reeves Pulley Co., Columbus, Indiana, copies of their catalogue and of their variable speed transmission devise.

The department has also received blue-prints from the following companies and persons: Allis-Chalmers Co., Chicago, Ills.; Atlas Engine Works, Indianapolis, Ind., Babcock & Wilcox Co., New York City, Ball Engine Co., Erie Pa., C. & G. Cooper & Co., Mt. Vernon, Ohio, Bradley Manufacturing Co., Pittsburg, Pa., William A. Harris, Steam Engine Co., Providence, R. I., Hill Clark & Co., Chicago, Ill., I. M. & E. Co., Newburg, New York, W. Sisson & Co., Gloucester, England, Southern Engine & Boiler Works, Jackson, Tenn., Southwark Foundry & Machine Co., Philadelphia, Pa., The Wellman-Seaver-Morgan Engineering Co., Cleveland, Ohio, Mr. W. J. Francke, New Brunswick, N. J., and Mr. Edgar Penny, Newburg, N. Y.

DEPARTMENT OF METALLURGY AND MINERALOGY.

From Mr. Henry L. Doherty, of Denver Gas & Electric Co., collection of ores and minerals together with a cabinet for their preservation and exhibition, value several hundred dollars.

DEPARTMENT OF ROMANCE LANGUAGES.

Professor J. D. Batchelder, 25 elementary text books, French and Spanish.

DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY.

One specimen of Kirtland's water snake from C. R. Diltz, Perry, Ohio, two specimens of jumping mouse, from E. E. Masterman, London, Ohio. Specimens of jumping mouse and green snake from E. F. Cranz, Ira, Ohio, set of reprints of the late Professor E. D. Cope from Mrs. E. D. Cope, Philadelphia, Pa. Also numerous reprints and reprints from government bureaus, experiment stations and various scientific workers.

The board of trustees desires to make special acknowledgment to the parties above named for their gifts to the university and its collections.

STUDENTS.

The number of students in attendance during the year just closed was as follows:

COLLEGE OF LAW.

First Semester 146.

Second Semester 139.

Other Colleges.

First Term 1463.

Second Term 1368,

Third Term 1196.

The total number enrolled during the year as shown by the catalogue hereto attached was 1,735; to these may be added the 75 students in attendance at the graduate summer school of agriculture, which makes the total enrollment 1,810. The numbers in the several departments and classes and the courses of study pursued in each are set forth in the report of the president which accompanies this report.

THE FACULTY.

The instructional force of the university for the past year was made up as follows: President 1, emeritus professors 4, professors 47, associate professors 20, assistant professors 19, lecturers 1, instructors 22, assistants 12, curators 1, High School visitors 1, fellows 12.

The library staff consists of the librarian, four assistants and one fellow.

The positions and compensations of members of the faculty and the position and compensation of other officers and employes of the university are given in the treasurer's report.

The university suffered a severe loss in the untimely death of Professor Ernst A. Eggers, who in a momentary insane impulse took his own life. This event occurred on the 8th day of April, 1903, and was a painful shock to all who knew him.

He had created the department of Germanic Languages and Literatures and had been its able and efficient director for a number of years.

He was an inspiring teacher and an active and influential member of the faculty. He was a man of fine feeling and generous impulses. These and other attractive personal qualities made him a general favorite. His death was deeply deplored not only in university circles but among a large circle of friends outside. His work for the remainder of the year was carried by Associate Professor Mesloh and other assistants in the department.

On June 23, 1903, Mr. Thomas F. Hunt, professor of agriculture and dean of the college of agriculture and domestic science tendered his resignation to take effect June 30, 1903, in order that he might accept a similar position at Cornell University. His resignation was of course accepted.

Professor Hunt was a most valuable officer of the university and as the head of the college of agriculture and domestic science had established a reputation as an instructor and administrator as wide as the country itself. He was so devoted to the university, had so thoroughly identified himself with the agricultural interests of the state, and understood so well the conditions and needs in the way of agricultural education in Ohio and the methods by which they might be advanced, it was hoped that he would decline this as he had former calls to other institutions offering him larger pecuniary compensation. But an offer from Cornell University of nearly double the salary which can be paid to a professor of

the Ohio State University, and a sense of the obligation resting upon him to provide for the future of a growing family impelled him to accept the call.

The loss of Professor Hunt is a serious blow to the university and to the agricultural interests of the state.

In the last annual report attention was called to the loss of two other valuable members of the faculty who were offered larger salaries elsewhere, and to the provisions of the law which limits the salary of a professor of the university to \$2,500. There is no such limitation in any other of the so called state universities in Ohio, and no board of education in the state so far as we can learn is so restricted. It is not just to the university that the legal restrictions above mentioned should be longer imposed. It puts it at a disadvantage with other institutions, in and out of the state, and the state at a disadvantage with other states and results in a distinct loss of prestige and power.

We hope that the attention of the general assembly will be called to this matter and that the restriction will be removed.

The other changes in the faculty are given in the president's report.

GRADUATE SCHOOL OF AGRICULTURE.

In the report for the year ending June 30, 1901, it was stated that Professor Hunt had presented to the American Association of Agricultural Colleges and Experiment Stations a plan for a National Graduate School of Agriculture and had proposed that the first and opening session of said school should be held at the university. Said plan and proposal were seconded by President Thompson and approved by the board of trustees and were presented to such association by President Thompson and and Professor Hunt, at its meeting in New Haven, November, 1901. The scheme as recommended was adopted by said association and upon the authorities of the university was devolved the duty of providing for the first session of such graduate school and the same was held at the Ohio State University beginning July 7, 1902.

Dr. A. C. True, of the department of agriculture at Washington was chosen as dean, Professor Hunt acted as registrar and 35 of the most eminent men of the country made up the faculty. Twenty-six were professors in agricultural colleges, 7 were leading officers in the department of agriculture at Washington and 2 were officers of the New York State Experiment Station. Seventy-five students were in attendance, coming from 28 states and territories and there was one student from Canada and one from the Argentine Republic.

The school was formally opened July 7, 1902 and addresses were made by the Hon. James Wilson, Secretary of Agriculture, President H. C. White of Georgia, and Dr. A. C. True.

It continued in session for four weeks. The entire expense including honorariums, expenses of lecturers, printing, postage, freight of livestock, labor, etc., was \$3,945.12. The sum of \$450 collected from the students was applied toward the payment of such expenses and the balance \$3,495.12 was paid by the university.

It is the opinion among those best qualified to judge that this school met a very real need in providing a center for the presentation of advanced knowledge on topics connected with the science and practice of agriculture.

It was conducted to the entire satisfaction of faculty and students and the results seem to have fully justified the outlay.

DEGREES CONFERRED.

At the commencement in June, 1903, on the recommendation of the faculty, the following degrees were conferred:

BACHELOR OF SCIENCE IN AGRICULTURE.

James Byrl Crabb, Mt. Sterling, Ohio; Theodore Walter Ditto, Delphos, Ohio; Ollie Wayman Ferguson, Columbus, Ohio; Frank Edward Hamilton, Brownsville, Ohio; Clarence Boal Hoover, Rosss, Ohio; Otto Emery Jennings, Olena, Ohio; Lloyd Jones, Columbus, Ohio; Chester Arthur McClelland, Terrace Park, Ohio; Charles Cardoza Poin-dexter, Parkersburg, W. Va.

BACHELOR OF SCIENCE.

In Horticulture and Forestry.

Frank C. Long, West Sonora, Ohio; Lee Downs Twitchell, Mansfield, Ohio.

BACHELOR OF SCIENCE.

In Domestic Science.

Lucy Blanch Clawson, Okeana, Ohio; Faith Robinson Lanman, Columbus, Ohio; Mary Gertrude McMahon, Columbus, Ohio.

BACHELOR OF ARTS.

Elizabeth Jane Adams, Columbus, Ohio; Ernestine Faye Ball, Columbus, Ohio; Alvin Cook Bonnet, Columbus, Ohio; Effie Irene Bridge, Columbus, Ohio; William Stacey Coy, Columbus, Ohio; Werter Clarkson Dyer, Plano, Ohio; Frank Huling, Columbus, Ohio; Sarah C. Jacoby,

Columbus, Ohio; Paul Homer Kohr, Columbus, Ohio; Mary Louise Mark, Columbus, Ohio; Lynn Boal Mitchell, Piqua, Ohio; Robert Edward Richardson, Toledo, Ohio; Maynard Wilbur Rothrock, Akron, Ohio; Frances Lyon Walsh, Columbus, Ohio; John Howell Warner, Leek, N. Y.; James Anderson Garfield Whetsel, Columbus, Ohio.

BACHELOR OF PHILOSOPHY.

Latin Course.

Bernard Barton Bigelow, Findlay, Ohio; Carl Howard Booth, Columbus, Ohio; Cora Vrooman Booth, Columbus, Ohio; Whittier Burnett, Waynesville, Ohio; Ruth Emily Davidson, Chicago, Ill., Katherine Eastman, Columbus, Ohio; George Edwin Hagenbuch, Urbana, Ohio; Hannah Margaret Leonard, Columbus, Ohio; Mary McMillan Loren, Columbus, Ohio; William Kookan Martin, Lancaster, Ohio; Mary Aloysia Molloy, Sandusky, Ohio; James Keen McDowell, Columbus, Ohio; Martha Evans Sproat, Columbus, Ohio; Mary Hill Taylor, Columbus, Ohio; Roy Washington Thompson, Gallipolis, Ohio.

BACHELOR OF PHILOSOPHY.

Modern Language Course.

Arthur E. Clagett, Dayton, Ohio; Claude Bernard Guittard, Columbus, Ohio; Harry Britton Hommon, Camp Chase, Ohio, Frank H. Miesse, Chillicothe, Ohio; Max De Los Morton, Ashtabula, Ohio; Clara Melissa Redrow, Williamsburg, Ohio; Bertha Louise Turner, Columbus, Ohio.

BACHELOR OF PHILOSOPHY.

English Course.

Francis Elizabeth Bradford, Columbus, Ohio; Jessie Marie Carpenter, Columbus, Ohio; John Charles Cone, Hamilton, Ohio; Benjamin Reinmund Dolson, Lancaster, Ohio; Susan Editha Garman, Dayton, Ohio; Egbert Hiram Mack, Sandusky, Ohio; Clarence R. Nachtrieb, Wauseon, Ohio, Charles Francis O'Brien, Urbana, Ohio; Minnie Ella Porter, New Philadelphia, Ohio; Frederick Augustus Roedel, Zanesville, Ohio; Warner Pike Simpson, Worthington, Ohio; Oral D. Tatje, Columbus, Ohio; Mima Jacobs Weaver, Dayton, Ohio.

BACHELOR OF PHILOSOPHY.

Commerce and Administration Course.

Thomas G. Lisle, Columbus, Ohio; Carl Haldy Postle, Columbus, Ohio.

BACHELOR OF SCIENCE.

James Anderson Beer, Ashland, Ohio; Andrew J. Biehl, Gilbon, Minn.; Harvey Brugger, Clyde, Ohio; Joseph Franklin Clevenger, Fletcher, Ohio; Robert Fiske Griggs, Columbus, Ohio; Max Withrow Morse, Columbus, Ohio; Charles Granville Souder, Lafayette, Ind.; Clinton Raymond Stauffer, Columbus, Ohio; John Anderson Wilkinson, Piqua, Ohio; Lucius Arthur Wing, Columbus, Ohio;

MASTER OF ARTS.

Catherine Emily Andrews, B. A. (Wellesley College) Columbus, Ohio; Harriet Griswold Burr, B. A. (Ohio State University) Worthington, Ohio; Winfred Forrest Coover, B. A. (Otterbein University) Dayton, Ohio; Clara Converse Ewalt, B. Ph. (Ohio State University) Columbus, Ohio; Charles R. Frankham, B. A. (Otterbein University) Columbus, Ohio; James Orlando Gauch, B. A. (Ohio State University) West Manchester, Ohio; Evaline Harrington, B. Ph. (Wooster University) Columbus, Ohio; Charles Clifford Huntington, B. Sc. (Antioch College) B. Ph. (Ohio State University) Yellow Springs, Ohio; Harriet R. Kirby, B. A. (Ohio State University) Columbus, Ohio; David Klein, B. Ph. (Ohio State University) Columbus, Ohio; James Glossbrenner Sanders, B. Ph. (Otterbein University) Westerville, Ohio; Ernest Avery Sanders B. A. (Otterbein University) Westerville, Ohio; Harry H. Snively, B. A. (Ohio State University) Columbus, Ohio; Arnot Wilson Whetstone, B. Ph. (Otterbein University) Van Buren, Ohio.

CIVIL ENGINEER IN ARCHITECTURE.

John William Peterson, Port Clinton, Ohio.

CIVIL ENGINEER.

Edward Holiday Ames, Columbus, Ohio; William John Barry, New Straitsville, Ohio; Thomas Hays Brannan, Columbus, Ohio; Edward Rosemond Brashear, Columbus, Ohio; Louis Eysenbach, Delphos, Ohio; Ross Elroy Hamilton, Coschocton, Ohio; Cortland Latimer Hill, Jr., Berlin Heights, Ohio; Cyrus Allen Melick, Columbus, Ohio; Joseph Lincoln Murphy, McArthur, Ohio; Henry Birdsall Nichols, Painesville, Ohio; George Alexander Ritchie, Hudson, Ohio; Roydon Karl Schlafly, Mt. Eaton, Ohio; Charles Wesley Schubert, Columbus, Ohio; Adolph Stellhorn, A. B. (Capital University) Columbus, Ohio.

ENGINEER OF MINES.

Walter Nelson Bomesberger, Columbiana, Ohio; Spencer Nye Cook, Chillicothe, Ohio; Vauss Foster, Higby, Ohio; Harry Hirst, Midvale, Ohio; George Garfield Long, Tippecanoe City, Ohio; Robert Wood Mercer, Chesterhill, Ohio; Wells Hammond Minor, Akron, Ohio.

MECHANICAL ENGINEER IN ELECTRICAL ENGINEERING.

Herbert Barton Brooks, Piqua, Ohio; Fred Raymond Kunkle, Bryan, Ohio; George Lewis Mooney, Woodsfield, Ohio; Ralph D. Nye, Zanesville, Ohio; Calvin Burt Ross, Urbana, Ohio; Carl Frederick Sloctemeyer, (St. Xavier College) Cincinnati, Ohio; Frank Merrill Webber, West Richfield, Ohio; William Raymond Youmans, Pataskala, Ohio.

MECHANICAL ENGINEER.

Ervin George Bailey, Damascus, Ohio; Dale Maxwell Boothman, Bryan, Ohio; Roy Edwin Cartzdafner, London, Ohio; John Edward Emswiler, Utica, Ohio; George Stanley Helvey, Hamilton, Ohio; Walter Raymond Judson, Dayton, Ohio; Walter Klie, Columbus, Ohio; Otto Zimmerman Linxweiller, Dayton, Ohio; Charles Howard Marshall, Fair Haven, Ohio; Wilbert Morlan, Rogers, Ohio; Willard Bernard Morris, Columbus, Ohio; Garfield Nathaniel Reed, Youngstown, Ohio; John Richard Templin, Columbus, Ohio; Charles Hovey Van Tine, Tiffin, Ohio; Vernon Champlin Ward, Columbus, Ohio; Carl Clifford Wilcox, Columbus, Ohio; Samuel S. Wyer, Barberton, Ohio.

BACHELOR OF SCIENCE IN CHEMISTRY.

Earl Luther Orndorf, Wauseon, Ohio; Harvey Leonard Shepard, Cincinnati, Ohio; Robert Browning Sosman, Chillicothe, Ohio.

BACHELOR OF LAWS.

Daniel Hinkel Armstrong, Jackson, Ohio; Charles Paul Burkey, Pleasantville, Ohio; Karl Edward Burr, A. B. (Princeton University) Columbus, Ohio; Boyd Patterson Doty, Lexington, Ohio; David Douglas DuBois, B. Sc. (Muskingum College) Bellaire, Ohio; Joseph Pentecost Eagleson, A. B. (Ohio State University) Columbus, Ohio; William McDowell Freshour, A. B., A. M. (Wittenberg College) Piqua, Ohio; George Enos Huston, Millersburg, Ohio; Elza J. Lambert, Chesterhill, Ohio; Edward Duncan Meek, B. A., A. M. (Ohio State University) Glencoe, Ohio; William Patrick Moloney, Coddington, Ohio; Walter Sharp

Page, B. A., (Yale University) Columbus, Ohio; Clyde C. Porter, B. S. (Heidelberg University) Tiffin, Ohio; Clarence Stahl Rice, A. B., A. M., (Wittenberg College) Springfield, Ohio; Henry Lancelot Scarlet, A. B. (Ohio State University) Columbus, Ohio; Thomas M. Sherman, B. Sc., (National Normal University) Columbus, Ohio; Philotas Mottier Smith, A. B. (Franklin College) Egypt, Ohio; Emery Allan Spurrier, Chesterhill, Ohio; Gilbert Holland Stewart, jr., Columbus, Ohio; Philip Burdell Treash, Ph. B. (Oberlin College) Akron, Ohio.

MASTER OF LAWS.

Harry Lea Doud, LL. B. (Ohio State University) Columbus, Ohio; Wood Frank Worcester, B. Ph., LL. B. (Ohio State University) Columbus, Ohio.

DOCTOR OF VETERINARY MEDICINE.

Thomas Olin Anders, Fremont, Ohio; John Ellis Bender, Louisville, Ohio; Pedro Leon Del Carril, San Juan, Argentina; George Edward Cook, Tedrow, Ohio; Norton Dock, Cincinnati, Ohio; Charles Clinton Lipp, New Middletown, Ohio; Regino Theodore Moreno, Corrientes, Argentina; John Harrison Reitz, Gilmore, Ohio.

Also on the recommendation of the faculty certificates were granted to the following members of the law class who had successfully and satisfactorily completed the course of study in the college of law, but on account of deficient previous preparation were not entitled to a degree; said persons having passed the state examination for admission to the bar: Oscar M. Abt, Canton, Ohio; Harry Delbert Ammon, Potsdam, Ohio; William Gobel Campbell, Preston, Ohio; John Wellington Davis, Ohlstown, Ohio; Clayton Rudolph Dietz, Trenton, Ohio; Harry Clayton Godown, Hilliards, Ohio; William E. Hosler, Laurelville, Ohio; Robert S. Kreigbaum, Canton, Ohio; Charles Foster Leeper, Marietta, Ohio; Ernest C. Madden, Columbus, Ohio; Lyman Gooderl Moore, Quaker City, Ohio; Eleanor Virginia Ragan, Napoleon, Ohio; Abner E. Riddle, Columbus, Ohio; Stephen Albert Sharp, Columbus, Ohio; Neil Starkey, Zanesville, Ohio; Edward George Taylor, Kenton, Ohio; George E. Walsh, Columbus, Ohio; Ralph Harold Wheeler, Canton, Ohio.

On the recommendation of the faculty certificates were granted to the following named persons showing that they had completed the studies in the shorter courses named:

SHORT COURSE IN AGRICULTURE.

Walter Tuttle Florence, Plain City, Ohio; Burt Miskimin, Plainfield, Ohio; Harry Lewis Topliff, La Rue, Ohio.

SHORT COURSE IN DOMESTIC SCIENCE.

Anne Victorine Nichols, Chillicothe, Ohio.

SHORT COURSE IN DAIRYING.

Walter Lane Ballard, Cleveland, Ohio; Harry Crisman, Centerburg, Ohio; Charles Harrington Davis, Newark, Ohio; Clarence Ford, Calla, Ohio; Thomas Grogan, Wilmington, Ohio; Otto Heller, Calumetville, Ohio; Walter Bert Horr, Mechanicsburg, Ohio; Harry Smith Mesloh, New Bremen, Ohio; Lem Oris Parker, Findlay, Ohio; John William Parkinson, Gowanda, N. Y.; Charles Hamilton Petit, Reynoldsburg, Ohio; John Earl Stormont, Xenia, Ohio; Arthur Algerman Weakley, Baltimore, Ohio; Thomas Raymond Winter, Worthington, Ohio.

SHORT COURSE IN CLAY WORKING.

Carl Hawthorn Griffin, Columbus, Ohio.

SHORT COURSE IN INDUSTRIAL ARTS.

Frank Garfield Hoover, New Berlin, Ohio; Howard Fred Tansey, Franklin, Ohio.

SHORT COURSE IN MINING.

Thomas Bruce Young, Vanderbilt, Ohio.

SHORT COURSE IN PHARMACY.

Clyde Samuel Beeler, Hamilton, Ohio; Edgar Sereno Bodman, Bement, Illinois; Archibald H. Dickerson, Louisville, Ky.

SHORT COURSE IN VETERINARY MEDICINE.

John Weslet Choate, Columbus, Ohio; Clyde Clark Heacock, Beloit, Ohio; Louis Hayes Meiche, N. Royalton, Ohio.

ESTIMATES.

Current Expenses.

Bonds and interest	\$ 36,212 50
Repairs	6,300 00
Fuel and light	13,500 00
Printing and advertising	2,700 00
Roads and grounds	2,100 00
Water	2,500 00
New boilers	7,900 00
Expenses of trustees	500 00
Library, books, supplies	6,000 00
Repairs and extensions, heat, light, power plant.....	4,100 00
Salaries	218,325 00
Department apparatus and supplies	13,300 00
Chemical store room	5,000 00
Incidentals	7,000 00
Total	<u>\$325,437 50</u>

Buildings.

Finishing addition to chemical building	\$ 2,426 51
Finishing veterinary building	11,028 58
Finishing engineering building	56,167 70
Equipment, new buildings	10,000 00
Building for department of physics	80,000 00
Total	<u>\$159,622 79</u>

To meet these improvements and the projected improvements mentioned elsewhere in this report the board of trustees respectfully asks the continuation of the generous support heretofore given by the general assembly.

Very respectfully,

ALEXIS COPE,
Secretary.

ANNUAL REPORT OF THE PRESIDENT TO THE BOARD OF TRUSTEES.

*To the HONORABLE PAUL JONES, President of the Board of Trustees of the
Ohio State University.*

DEAR SIR:—I have the honor to present through you to the board of trustees of the Ohio State University for transmission to the Governor, the annual report of the president for the year ending June 30, 1903.

THE FACULTY.

On April 8, 1903, Ernst August Eggers died. Professor Eggers came to the University first as assistant in the year 1886 and was promoted to the rank of assistant professor in 1888. In 1890 he was made head of the department of Germanic languages and literatures and for almost thirteen years in that capacity served with great distinction and efficiency. He was a man of accurate scholarship; of fine literary taste, and enthusiastic in his devotion to the cause of education, especially in the department of modern languages. In addition to his work in the University he was the organizer and most active promoter of the Modern Language Association in Ohio. To his efforts the present efficiency of that organization is largely due. His death was a distinct loss to the university and to the cause of education throughout the state.

The transfer of Professor Thomas Forsyth Hunt to Cornell University was a matter of sincere regret. Professor Hunt has won for himself a national reputation in agricultural circles and it must be confessed that it is a matter of some humiliation to see men of such grade called to other institutions while the Ohio State University is left unable to retain them simply for financial reasons. Professor Hunt had been for eleven years professor of agriculture and dean of the College of Agriculture and Domestic Science. His eminent fitness for this work and the progress of the University made his services beyond ordinary money values. The fact, however, that the statutes of Ohio provide that not more than \$2,500 may be paid to a professor, puts the institution always at a disadvantage. At present the University is not able to pay up to this limit. The growth of the institution has been so rapid and the demand for teachers so great that it has been necessary to multiply teachers and put salaries at the lowest possible point. The board of trustees of the Ohio State University is the only board of education in the state of

Ohio which is limited in its power to provide what its own judgment thinks is right in the way of salaries for instruction. It is hoped that the experience in the case of Professor Hunt will awaken the legislature of the state of Ohio to the importance of giving the University not only the liberty it should have but the money necessary to keep in the service of the state men whose reputation and efficiency are absolutely beyond question.

During the year Professor Thomas Corwin Mendenhall and Professor Robert White McFarland were elected as Professors Emeritus. These men were in the services of the institution in its early history and helped to lay the foundations that have given both name and place to the institution. It seemed to the board eminently proper that the names of these two gentlemen whose best years had been given to the University should be perpetually associated with its history.

A few changes have been made in the faculty as is usual from year to year among the men occupying positions below the rank of professor. Young men who have proven their ability and fitness are liable to receive promotions in rank and salary, and feel it their duty to accept such positions when offered. The work of the Ohio State University is much more widely known outside of the state than it is within our own borders. Men who are competent to serve in the teaching force of this institution are likely to be called to more lucrative positions. It is hoped that the state of Ohio will some day appreciate the dignity and importance of its own instructional force sufficiently to warrant the permanent tenure in office of men whose scholarship, teaching ability and services to the cause of public education have been fully attested.

ENROLLMENT.

The enrollment of the University for the year has been the largest in its history. For some years the students have been gathered substantially from every county in the state. The year under consideration has been no exception in this regard. The general summary of the attendance will be found on pages 212 and 213 of part second of the thirty-third annual report. The enrollment for the year closed is inserted herewith and also a comparative statement for the past five years. This statement shows not only the totals but the attendance in the several colleges of the University.

General summary for the year ending June 30, 1903.

College of Agriculture and Domestic Science—	
Undergraduates	243
	— 243
College of Arts, Philosophy and Science—	
Graduates	38
Undergraduates	490
	— 528

College of Engineering—

Undergraduates	662
	— 662
College of Law	166
College of Pharmacy	40
College of Veterinary Medicine	94
Lake Laboratory, summer 1902	24
	—
Total	1,757
Names counted twice	22
	—
Net total	1,735

DEGREES GRANTED.

In June 1903 degrees were granted as follows:

College of Agriculture and Domestic Science—

Bachelor of Science in Agriculture.....	9
Bachelor of Science in Horticulture and Forestry	2
Bachelor of Science in Domestic Science	3
	—
Total	14

College of Arts, Philosophy and Science—

Bachelor of Arts	16
Bachelor of Philosophy	37
Bachelor of Science	10
Master of Arts	14
	—
Total	77

College of Engineering:

Civil Engineer in Architecture	1
Civil Engineer	14
Engineer of Mines	7
Mechanical Engineer in Electrical Engineering	8
Mechanical Engineer	17
Bachelor of Science in Chemistry	3
	—
	50

College of Law—

Bachelor of Laws	20
Master of Laws	2
	—
Total	22

College of Veterinary Medicine—

Doctor of Veterinary Medicine.....	8
	—
Total degrees granted	171

COMPARATIVE STATEMENT.

	1898-99	'99-1900	1900-01	1901-02	1902-03
College of Agriculture and Domestic Science	164	157	210	198	243
College of Arts, Philosophy and Science	398	444	482	450	528
College of Engineering	344	405	508	585	662
College of Law	191	201	220	188	166
College of Pharmacy	35	39	34	40	40
College of Veterinary Medicine..	12	22	27	67	94
Summer School	34	.....	.....	.....	24
Total	1,178	1,286	1,481	1,528	1,757
Names counted twice	29	16	16	12	22
Net total	1,149	1,252	1,465	1,516	1,735

The above statements show the very rapid and substantial growth of the University in the matter of enrollment. During this period the state has provided a considerable amount of money for the erection of buildings but no corresponding increase for current expenses has been provided; so that the growth has been an embarrassment of a very serious nature to the institution. The College of Engineering, for example, has made a noted increase during this time of 318. When it is remembered that these students demand a large outlay of money in order to provide the necessary laboratory privileges, the necessary instruction in shop work and other features of a technical education, it will be recognized that increasing revenue for current expenses is absolutely necessary in order to maintain the high grade of instruction on which the University has built its reputation.

The College of Agriculture has also shown a considerable increase. These two colleges of the University more than any others demand an annual outlay of considerable money aside from the revenue needed for instruction. The friends of the university are highly gratified at the increased enrollment. It is sincerely hoped that they will be equally enthusiastic in making provision for the increasing needs as they come.

THE UNIVERSITY AND HIGH SCHOOLS.

It has been the aim of the University for a number of years to relate itself to the high schools of the state in such a way as to make it easy for

graduates of approved schools to enter the University. From year to year the faculty has sought to make the requirements for entrance substantially such as have been recommended by the National Educational Association and the North Central Association of Colleges and Secondary Schools.

In order to make this more effective the board of trustees during the past year appointed Mr. W. W. Boyd as High School Visitor. Mr. Boyd is a graduate of Marietta College and for some years served as a high school teacher at Marietta. He afterwards served as superintendent of schools at Marietta and later at Painesville, Ohio. His intimate acquaintance with the conditions in high schools and his accurate knowledge of a college education make him an efficient officer. The University aims through the services of the High School Visitor to cooperate with boards of education, superintendents, principals and teachers in adjusting the work of students so that those desiring to enter the University or go to other colleges may do so with the least possible loss of time and preparation. Experience for the past five years has proved beyond controversy that students may not be enrolled safely upon such reports as are possible from the schools. The usual certificates received from high schools give a very incomplete return of the actual conditions and are of little value as a testimony of the ability of a graduate to proceed with work of a college grade. It has not been practicable to examine all applicants for entrance and the University is following in the lead of other universities in the West in making an effort to come into closer acquaintance with the work done in the high schools. The increasing number of young men and young women graduating from these schools makes it certain that our colleges ought to have larger enrollments in the future. It is of the highest importance that the quality of the education shall be maintained. The State University deemed it a duty to render such service in this particular as would be agreeable to the high schools. During the past year Mr. Boyd has visited 151 high schools and his work has not only been appreciated by the schools but has been of great service to the students and to the University. It is confidently believed that this method of visitation will increase materially the number of young men and young women who will go to college—a portion of which will enroll at the University and a considerable portion of which will be found in other colleges throughout the state.

THE COLLEGES.

THE COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE. The past year has shown an increase of forty-five students. The vacancy caused by the resignation of Professor Thomas Forsyth Hunt was filled by the election of Professor Homer Charles Price, a graduate of the Ohio State University in the class of 1897, who received his master's degree from

Cornell in 1899. He then came to the University as assistant in the department of horticulture and later was in charge of that department in the Iowa State College of Agriculture and Mechanic Arts.

The most important advance during the year has been the election of Professor Charles S. Plumb to the Department of Animal Husbandry. Professor Plumb's efficiency in the department to which he has been elected here is so well known that the animal husbandry interests of the state are confidently expecting a great advance in these lines. A limited amount of work has been carried in this line for some years but the coming of Professor Plumb is an indication of a distinct development in the lines of animal husbandry.

The College of Agriculture is organized and prepared to teach in the following lines, viz: (1) rural economics or farm management; (2) animal husbandry; (3) agronomy; (4) dairying; (5) agricultural chemistry; (6) horticulture and forestry; (7) botany. In addition to these a number of lines of science, mathematics and other subjects are provided for in the faculty. It is desired to add the department of rural engineering as soon as the funds will permit.

The needs of the College of Agriculture have been presented repeatedly to the president and it seems imperative that some added provisions shall be made to equip properly the existing departments to aid the work demanded by a scientific agricultural education. There is need of a building of considerable size that would accommodate the departments of horticulture and forestry and of botany. The University farm needs better provision for animal husbandry. The dairying school needs some new equipment and the replacing of material already worn out. The University farm should have a barn of adequate dimensions and equipped in such a way as to make the work of the College of Agriculture of the highest service to the students. It is not the purpose of this report to narrate in detail these needs but to suggest that the growth of the work in the last few years has made it imperative that the equipment shall keep pace with the demands of education.

THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE. The enrollment in this college for the current year has been 528. Of these 38 were graduate students and 490 undergraduates. The recent revision of the work in this college is noteworthy. The work of this college is now arranged on a most liberal basis. About one-third of the work is prescribed, although there is considerable liberty allowed even in the selection of this portion. Reference is here made to the outline of this work as seen on pages 80-84 of part second of this report.

One of the pressing needs in this college at present is extended provision for higher commercial education. In some regards the Ohio State University has been a pioneer in this work but through lack of funds the institution has not been able to carry on the plans hitherto

under consideration. The state universities throughout the Middle West recognizing the importance of such education are reorganizing to give instruction in the processes of modern industry and commerce. The work usually covers such subjects as economic geography; commercial and industrial history; an extended study of money, banking and finances; a study of the resources of the country, especially in its extractive industries and its manufactures. The problems of foreign trade, commerce and transportation; of statistics; of diplomacy; of commercial law are studied in addition to courses in the modern languages. Such an education bears much the same relation to public life that technical education does to the industries.

The graduate school has within the past year been more definitely organized by provision being made for an administrative board, consisting of the dean and four other members chosen from the faculty. The development of graduate work is always a matter of years but the University aims to meet these demands as rapidly as they are made consistent with the money available for graduate instruction. The library facilities are the most important element in the development of the College of Arts—either in undergraduate or graduate study. The University library is well selected but inadequate.

THE COLLEGE OF ENGINEERING. This college has suffered perhaps more than any other in the university from the rapid growth in numbers. The requirements of a technical education are imperative and expensive. From year to year the annual reports have called attention to the inadequate provision in the way of buildings. Recently provision has been made for the erection of a physics building and during the current year the first building for the College of Engineering is in process of erection. This will make provision for the departments of civil engineering and of architecture and drawing. In the immediate future imperative demands will be made for the departments of mine engineering, ceramics, electrical engineering and mechanical engineering. There should be \$250,000 provided in order to erect necessary buildings and equip them for the accommodation of students. If the present rate of growth increases it will not be long until there will be a thousand students studying in the several lines of engineering now offered. This technical education is of such importance that we cannot afford to neglect it. The young men of the state have few opportunities for such an education and must have it provided at home or at a much greater expense abroad. There is no sufficient reason why the state of Ohio should not make provision ample to meet the needs of the young men who are asking for such training as shall enable them to develop the wealth and resources of the country.

THE COLLEGE OF LAW. During the year Page Hall for the College of Law has been completed. The dedication exercises occurred on Tues-

day, June 23, during commencement week. The provision for this building was made by the legislature in 1900. The building is a substantial structure entirely adequate to the needs of the College of Law and is a source of great satisfaction to the friends of legal education. The cost of this building was approximately \$100,000.

The College of Law has raised its requirements for entrance so that they are the same as the requirements for entrance to the College of Arts, Philosophy and Science. In addition to this the degree of Bachelor of Laws is not granted to students unless they have had in addition to their entrance requirements at least two years of work in a literary college or its equivalent. This high standard has caused temporarily a decrease in attendance. Students find it easier to enter other colleges and also find it possible to secure the degree from other colleges of law not requiring any education beyond that of the high school. It is believed, however, that the College of Law is on the right basis and that its stand for a higher grade of legal education will commend itself not only to members of the bar, but to the young men desiring a legal education.

THE COLLEGE OF PHARMACY. This college, although small in number, is performing an important work in the education of pharmacists. Public sentiment in the country has not yet demanded a superior training and education for many of its valued servants. It is the work of the colleges of this character to train a few men who shall be able to lead public sentiment to so improve the profession as to create a demand for a higher education of those who are to serve in such important relations. The equipment and provision for pharmaceutical education in the Ohio State University is believed to be of the very best quality and the results already reached are very gratifying.

THE COLLEGE OF VETERINARY MEDICINE. During the current year a much needed building at a cost of about \$35,000 has been erected for the College of Veterinary Medicine. This will make provision for the needs for some time. The growth of this college indicates increasing interest in veterinary science. In the new building the department of bacteriology will be located and when the equipment is provided Ohio will have one of the most aggressive colleges for the study of veterinary medicine in the country. The close relation of the work in this college and that of the College of Agriculture and Domestic Science is not always understood by the public. All students in the College of Agriculture receive instruction in the College of Veterinary Medicine. The building is but partially equipped. The enlargement of the work occasioned by the erection of this building makes new and expensive equipment necessary. It is hoped that within the next year the funds of the University will provide for pressing needs.

GENERAL UNIVERSITY NEEDS.

There are needs of a large and growing institution that cannot be listed under particular colleges. Among these I make mention of the importance of an independent water system. For the current year the University has paid the city of Columbus a little more than \$2,600 for water that is not fit for any ordinary uses. The University needs in its dairy department pure water. It needs a good quality of water for use in its heating apparatus; besides, the high rates charged are such as to make it profitable to provide an independent water system for the University. It is hoped that the next legislature will give this matter careful consideration. A report has been submitted to the Board of Trustees by a committee after experiments have been made with driven wells upon the campus. It seems unwise that the state's needs should be dependent upon the uncertain and unsatisfactory supply of a local municipality.

Another pressing need of the University at large is provision for a library. At present accommodations are found in a portion of Orton Hall. The increasing attendance and the increase in the number of books from year to year make it impossible to provide either comfortably or adequately for the demands as they are at present. It is of little use to buy books unless we are in position to care for them. The fact remains that there is no library in Ohio today where the material can be found for writing a history of our own commonwealth. Men who do such work must go to large libraries in the western states or in the East. The Ohio State University ought to have an adequate library building and the state ought to spend enough money for books to make the library adequate to the needs of the University and of scholars who wish to consult a library. Reference is here made to the librarian's report for the current year for information as to the organization and equipment of the present library.

Another pressing need is some provision for the accommodation of young women. Originally the institution was organized as an agricultural and mechanical college. That of course anticipated a large attendance of young men. With the development of the university idea young women have come in increasing numbers and would come in much larger numbers if any provision was made for their comfort. There is no legitimate argument that can be used against the states making provision for its young women. They are denied to a large degree the privilege of the university by the lack herein suggested.

In the reports of previous years reference has been made to the desire for a teachers' college. The fact that the state has already organized two normal schools only adds to the argument for some provision for the higher education of teachers. The department of education, organized some years ago in the College of Arts, Philosophy, and Science, has attempted to do something in this direction. This, however, is but a partial provi-

sion. With comparatively little expense this department could be expanded or a new organization effected that would offer to the teachers in our high schools and colleges an opportunity for a scholarly investigation of the problems of higher education. The scope of the University will not be complete until some such provision is made.

The experience of the past four years of the present administration has emphasized the necessity of increasing the salaries of teachers. At the founding of the institution salaries were larger for heads of departments than they are at present. It is a matter of common justice that the state should pay its servants approximately what they are worth. The commercial demand for young men with a college education is making it increasingly difficult from year to year to secure competent men for college professorships. These positions require extensive training and a large investment of time and money in order that the men may be fitted for the positions. It is extremely discouraging after years spent in preparation to find the services of educated men less valuable from a money point of view than they are likely to be without the education. The college bred man even without graduate study is often paid much larger sums of money than any university can offer. The cost of living and the necessary investments that men must make in libraries unite to emphasize the importance of adequate salaries for men who devote their lives to the profession of teaching.

The year just closed has been characterized by unity in the faculty; earnestness in the students; and the hearty co-operation of the Board of Trustees. The problems before the University are the problems of its own growth and development. The demands are usually in advance of the supply. It is a matter however of sincere gratification to know that the university is serving the public efficiently and meeting a demand that increases from year to year.

The statistical tables as required by law are submitted as an appendix to this report.

Respectfully submitted,

W. O. THOMPSON,
President.

TABLE I.—THE WORK OF INSTRUCTORS, 1902-1903.

Course Subjects.	Department Number.			Total Hours per Week.									Number of Students.		
				Lectures.			Laboratory								
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Agriculture.															
Breeds of Live Stock	28	39	...	3	5	...	3	3	...	41	36	...	36	7	...
Stock Feeding and Hygiene	31	32	10	4	4	4	...	...	...	8	7	...	35	...	...
Breeds: Principles of Breeding	8	9	30	3	3	3	3	2	3	37	45	20	...	...	...
Animal Mechanics and Exterior	14	...	3	...	...	...	3	...	...	5	...	...	...	...	...
Advanced Zootechny .....	...	36	...	2	...	...	...	3	...	7	...	...	...	...	...
Dairy Farming .....	...	5	...	12	...	...	...	12	...	44	...	...	...	...	...
Farm Equipment	11	...	3	...	...	...	9	...	...	18	...	...	...	...	...
Soils .....	...	12	...	3	...	...	...	9	...	27	...	...	...	...	...
Agronomy	19	20	...	1	1	1	6	6	...	9	8	...	...	...	...
Elements of Dairying: Butter Making	22	15	22	2	1	2	9	8	8	19	13	12	...	...	...
Milk Inspection	18	...	1	...	...	...	2	...	...	7	...	...	...	...	...
Butter and Cheese Making .....	...	6	...	...	...	...	...	16	...	42	...	...	...	...	...
Butter and Cheese Making .....	...	7	...	2	...	...	...	...	...	42	...	...	...	...	...
Farm Crops .....	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...
Rural Engineering .....	...	13	...	3	...	...	...	...	6	...	...	...	...	...	...
Rural Economics .....	...	21	...	1	...	...	...	...	...	...	...	...	...	...	...
Cheese Making .....	...	16	...	4	...	...	...	...	...	...	...	...	...	...	...
Cheese Making .....	...	25	...	1	...	...	...	...	6	...	...	...	...	...	...
Agricultural Chemistry.															
Principles and Non-metals	1	...	...	2	...	...	5	...	...	129	94	50	...	...	...
Lectures and Laboratory	4	...	...	1	...	...	8	...	...	30	...	...	...	...	...
Quantitative Analysis	6	...	...	...	...	...	10	...	...	3	...	...	...	...	...
Organic Chemistry .....	...	8	...	2	...	...	...	5	...	104	...	...	...	...	...
Lectures and Laboratory .....	...	4	...	1	...	...	...	8	...	33	...	...	...	...	...
Quantitative Analysis .....	...	6	...	...	...	...	10	...	...	33	...	...	...	...	...
Chemistry of Milk .....	...	7	...	2	...	...	...	4	...	50	...	...	...	...	...
Applications .....	...	9	...	2	...	...	...	...	8	40	...	...	...	...	...
Lectures and Laboratory .....	...	4	...	1	...	...	...	...	8	21	...	...	...	...	...
Quantitative Analysis .....	...	6	...	...	...	...	10	...	...	5	...	...	...	...	...
American History and Political Science— American History.															
Political History of the United States	1	1	...	9	9	9	...	...	...	88	82	76	...	...	...
Political History of Slavery to 1850	4	...	...	3	...	...	...	...	...	43	...	...	...	...	...
History of Political Parties	7	7	...	3	3	3	...	...	...	6	3	3	...	...	...
History Material and Its Use	8	8	...	1	1	1	...	...	...	8	8	8	...	...	...
Undergraduate Seminary	10	10	...	...	...	...	12	2	2	15	14	13	...	...	...
Graduate Seminary	12	12	...	...	...	...	12	2	2	4	4	3	...	...	...
Special Graduate Research	13	13	...	...	...	...	1	1	1	1	1	1	...	...	...
Secession, Civil War, etc. ....	...	5	...	3	3	...	...	...	...	41	36	...	...	...	...
American Diplomatic History .....	...	*6	...	...	...	...	...	...	...	...	...	...	...	...	...
The Teaching of American History	11	...	...	1	1	...	...	...	...	11	14	...	...	...	...
Political Science.															
Modern Political Institutions	1	1	...	3	3	3	...	...	...	22	22	18	...	...	...
International Law	4	4	...	2	2	...	...	...	...	15	14	...	...	...	...
Government of Dependencies	6	...	...	2	...	...	...	...	...	10	...	...	...	...	...
Theories of Government, etc.	10	10	...	2	2	2	...	...	...	3	2	2	...	...	...
Colonial Institutions .....	...	7	...	2	...	...	...	...	...	8	...	...	...	...	...
History of Treaties .....	...	5	...	2	...	...	...	...	...	...	...	...	...	...	...
Municipal Government .....	...	8	...	2	...	...	...	...	...	...	...	...	...	...	...
Constitutional Law .....	...	...	4	2	...	...	...	...	...	56	...	...	...	...	...

* Special.

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.									Number of Students.		
				Lectures.			Laboratory.								
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Anatomy and Physiology.															
Anatomy and Physiology.....	1	1	1	6	6	6	2	2	2	95	83	83			
Bacteriology	13	13	13	1	1	1	1	1	1	8	10	10			
Bacteriology		4	4		1	1	1	1	1	3	22	28			
Histology and Histo-Chemistry.....				3	3	3	10	10	10	40	35	37			
Physiological Laboratory	9	9	9	1	1	1	8	8	8	4	4	6			
Special Laboratory				1	1	1	4	4	4	3	3	3			
Graduate Work							10	10	10	2	2	2			
Dairy Bacteriology									1						
Veterinary Physiology	14	14	14												
Anatomy and Physiology															
Microscopy.....										2					
Chemical Physiology										10					
Bacteriology			10						1						
Architecture and Drawing.															
Freehand Drawing	1	1	1				58	62	24	246	301	53			
Lettering	2		2	1			5			47		193			
Projection Drawing	3	3		7	1		14	4	25	160	25				
Technical Drawing	5		16	1			5		4	46		4			
Photography	7		7				1	4	8	18		40			
Pen Drawing	14							4		5					
Oil and Water Color Painting.....	17	18	19				6	6	22	28		34			
Descriptive Geometry		3			4			8			49				
Descriptive Geometry		3						8			103				
Architectural History	9	10	11	3	3	3					5				
Architectural Detail Drawing.....	12	13	14				4	4	4	4	3	3			
Architectural Decoration	5			2			2			5					
Architectural Designing	15	16	17	1			6	4	8	4		4			
Architectural Designing	18	21	19				8	4	8	2	2	2			
Architectural Perspective			3			2				8					
Shades, Shadows and Perspective			3			4						125			
Mechanical Drawing			11			1				8		4			
Draughting and Blue Printing			4			2						22			
Clay Modeling	12	12						4	4		11	7			
Specifications	4				1			2			3				
Heating, Ventilating and Plumbing.....	7				3			4			2				
Estimates and Superintendence			6			2			4			3			
Thesis			20						10			2			
Astronomy.															
General Astronomy	1	1	1	2	2	2				14	12	12			
Astronomy, Geodesy and Least Squares.....	2	2	2	3	3	4				19	18	16			
Special					3						1				
Meteorology			3			2						11			
Botany.															
Systematic and Physiological Botany.....	3			2			4			5					
Physiological Botany	6			3			2			46					
Dendrology	9	10		1	1		2	2	2	3	6				
Physiological and Household Botany.....	12	12		3	3		2	2	2	11	10				
Laboratory Work.....	16	16					6	6		1	1				
Ecology	21			2			2			12					
Laboratory and Field Work.....	24	24	24				6	6	6	8	7	6			
Laboratory Work: Histology & Physiology.....	25	25	25				6	6	6	3	3	2			
Histology and Microtechnique	26	26	26				10	10	10	4	4	3			
Research Work in Morphology	29	29	29				10	10	10	3	2	1			
Monographic Work	30	30	30				10	10	10	1	1	1			

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Botany—Continued.												
Research Work in Ecology	31	31	.....	.....	.....	.....	5	5	.....	1	1	...
Special .....	.....	.....	.....	.....	.....	.....	6	6	.....	4	4	...
Systematic Botany .....	.....	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	11
Medical Botany .....	.....	4	.....	.....	.....	.....	4	.....	.....	.....	.....	3
Vegetable Pathology .....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
Economic Botany .....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Morphology and Physiology .....	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
Field Work in Systematic Botany .....	.....	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Current Literature .....	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Minor Investigations .....	.....	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Elementary Botany .....	.....	1	.....	.....	3	.....	.....	.....	2	.....	.....	35
Thesis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5	5
Ceramics.												
Ceramic Chemistry	1	.....	.....	1	.....	.....	10	.....	.....	14	.....	...
Ceramic Chemistry .....	.....	2	.....	.....	1	.....	.....	10	.....	.....	11	...
Ceramic Chemistry .....	.....	.....	3	.....	1	.....	.....	.....	10	.....	.....	6
Lectures in Clay Manufacture .....	.....	4	.....	.....	5	.....	.....	.....	.....	10	.....	.....
Lectures in Clay Manufacture .....	.....	5	.....	.....	10	.....	.....	.....	.....	.....	11	.....
Lectures in Clay Manufacture .....	.....	.....	6	.....	.....	10	.....	.....	.....	.....	.....	9
Ceramic Chemistry .....	.....	7	.....	.....	.....	.....	.....	10	.....	.....	5	.....
Laboratory Work in Ceramics .....	.....	9	.....	.....	.....	.....	.....	10	.....	1	.....	.....
Laboratory Work in Ceramics .....	.....	10	.....	.....	.....	.....	.....	10	.....	.....	2	.....
Laboratory Work in Ceramics .....	.....	.....	11	.....	.....	.....	.....	.....	10	.....	.....	2
Lectures on Cement Manufacture .....	.....	12	.....	.....	5	.....	.....	.....	.....	.....	3	.....
Ceramic Construction .....	.....	17	.....	.....	.....	.....	.....	10	.....	.....	1	.....
Special Ceramics (clay) .....	.....	.....	*	.....	1	.....	.....	.....	5	.....	.....	1
Special Ceramics (cement) .....	.....	.....	*	.....	1	.....	.....	.....	2	.....	.....	1
Chemistry.												
Elementary Chemistry	1	1	1	3	2	.....	2	2	2	100	91	90
Elementary Chemistry	3	3	.....	3	2	.....	6	6	.....	34	31	.....
Qualitative Analysis .....	.....	.....	.....	1	1	.....	4-8	4-8	.....	24	22	.....
Elementary Chemistry	7	7	.....	.....	.....	.....	.....	.....	.....	280	235	.....
Organic Chemistry	8	9	9	.....	.....	.....	6	6	6	19	13	13
Quantitative Analysis	20	20	20	1	1	1	4-8	4-8	4-8	21	17	15
Advanced General Chemistry	21	21	21	.....	.....	.....	.....	.....	.....	31	30	22
Advanced Chemistry	27	27	27	1-2	1-2	1-2	6-10	6-10	6-10	5	5	5
Stoichiometry	31	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....
Analytical Chemistry	33	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....
Industrial Chemistry	32	32	.....	.....	2	.....	.....	4	4	4	5	.....
Toxicology .....	.....	11	.....	.....	4	.....	.....	.....	.....	.....	.....	7
Sanitary Analysis .....	.....	15	.....	.....	2	.....	.....	.....	4	.....	.....	5
Inorganic Preparations .....	.....	17	.....	.....	1	.....	.....	6-8	.....	.....	16	.....
Physical Chemistry .....	.....	30	30	.....	3	3	.....	.....	.....	12	12	.....
Organic Chemistry .....	.....	28	.....	.....	2	.....	.....	.....	.....	.....	5	.....
Qualitative Analysis .....	.....	12	.....	.....	1	.....	.....	.....	6	.....	220	.....
Organic Chemistry .....	.....	22	.....	.....	2	.....	.....	6	.....	3	.....	.....
Civil Engineering.												
Land Surveying	1	.....	.....	60	.....	.....	24	.....	.....	52	.....	.....
Topographic Surveying	3	.....	.....	12	.....	.....	84	.....	.....	17	.....	.....
Bridge Designing	8	.....	.....	60	.....	.....	24	.....	.....	13	.....	.....
Masonry Construction	15	.....	.....	60	.....	.....	.....	.....	.....	20	.....	.....
Highway Construction	16	.....	.....	60	.....	.....	.....	.....	.....	16	.....	.....
Railway Location	17	.....	.....	55	.....	.....	.....	.....	.....	8	.....	.....
Cement Testing	14	.....	.....	.....	.....	.....	44	.....	.....	14	.....	.....

* Special.

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Civil Engineering—Concluded.												
Advanced Bridge Work		25			55						5	...
Steel Skeleton Construction		26			33						2	...
Stereotomy		6						66			20	...
Topographic Drawing		4			11			88			44	...
Drawing of Engineering Structures		24			11			110			20	...
Bridge Stresses		7			45						12	...
Roof Trusses, etc.		19			45						25	...
Railway Surveying		2			45			27			40	...
Sanitary Engineering		10			30						14	...
Water Supply Engineering		18			30						12	...
Plane Surveying		21			30						15	...
Thesis Work					18			18			15	...
Summer Camp											15	...
Extra Class, winter term.											7	...
Domestic Economy.												
Food Economics	1			2			6			10		...
Preservation of Foods	4			2			6			7		...
Food Economics		2			2			6			10	...
The Industrial and Artistic Evolution of Society		5			2			6			9	...
Lectures on Textiles	7			1				6			7	...
Lectures on History of Arts, Architecture and Historic Costumes.		8			1			6			6	...
Therapeutic Diet and Emergency Work.		11			1			3			4	...
Thesis				2	2					3	3	...
Advanced Food Economics										6		9
Household Science and Sanitation												6
Theory and Practice of Domestic Science										3		2
Thesis												3
Lectures on Textiles										3		9
Lectures on Historic Art and the Decoration of the House			9			1			3			7
Economics and Sociology.												
Elements of Political Economy	1	1	1	6	6	6				99	86	76
Industrial Society (of England)	2			3						58		...
Industrial and Financial History of the United States			3		3						68	...
Transportation History of the United States				4			3					67
Practical Problems: Immigration	5			2						23		...
Practical Problems: Tariff		6			2						24	...
Practical Problems: Labor and Capital			7			2						30
Public Finance and Taxation	8	8		2	2					10	10	...
Money, Credit and Banking			9			2						12
Commerce	10	10	10	3	3	3				7	7	8
Sociology-Primitive Society	11	11	22	3	3	3				19	18	12
Economic Literature and Legislation	14	14	14	1	1	1				13	11	13
Business Laws and Forms	18	18		2	2					12	14	...
Corporation Problems			19			2						13
Seminary in Economics	15	15	15	2	2	2				7	7	7
Seminary in Sociology	17	17	17	2	2	2				6	6	6
Advanced Economics: Graduate Work.	17	17	17	3	3	3				3	3	3

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.									Number of Students.		
				Lectures.			Laboratory								
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Education.															
Educational Psychology	1	1	.....	3	3	3	.....	.....	.....	9	9	9	9	9	9
Introduction to Educational Theory	3	2	.....	3	3	3	.....	.....	.....	1	1	1	1	1	1
History of Education	3	3	.....	3	3	3	.....	.....	.....	1	1	1	1	1	1
Child Study	4	4	.....	3	3	3	.....	.....	.....	4	4	4	4	4	4
Secondary Education	7	7	.....	3	3	3	.....	.....	.....	4	4	4	4	4	4
Seminar	9	9	.....	3	3	3	.....	.....	.....	2	2	2	2	2	2
Electrical Engineering.															
Electrical Engineering	6	6	.....	2	2	.....	.....	.....	.....	52	43	.....	.....	.....	.....
Electrical Laboratory	7	7	.....	.....	.....	.....	16	20	.....	32	40	.....	.....	.....	.....
Direct Current Dynamos .....	.....	8	.....	.....	4	.....	.....	.....	.....	.....	27	.....	.....	.....	.....
Elementary Dynamo Laboratory .....	.....	9	.....	.....	.....	.....	.....	.....	16	.....	26	.....	.....	.....	.....
Alternating Current Machinery	10	10	.....	3	3	.....	.....	.....	.....	8	7	.....	.....	.....	.....
Advanced Dynamo Laboratory	11	11	11	.....	.....	.....	6	6	6	9	8	8	8	8	8
Transmission and Distribution .....	.....	12	.....	2	.....	.....	.....	.....	.....	6	6	6	6	6	6
Applications of Electricity .....	.....	13	.....	.....	.....	5	.....	.....	.....	.....	7	.....	.....	.....	.....
Electrical Design .....	.....	14	14	.....	.....	.....	8	8	.....	10	8	.....	.....	.....	.....
English Literature.															
Introduction to English Literature	1	1	1	6	6	6	.....	.....	.....	81	68	60	.....	.....	.....
From Spencer to Milton, exclusive of the Drama	2	.....	.....	2	.....	.....	.....	.....	.....	21	.....	.....	.....	.....	.....
From Dryden to Pope, exclusive of the Drama .....	.....	3	.....	.....	2	.....	.....	.....	.....	.....	29	.....	.....	.....	.....
Prose from Burke to Victorian Age	5	.....	.....	3	.....	.....	.....	.....	.....	11	.....	.....	.....	.....	.....
Poetry from Burns to Victorian Age .....	.....	6	6	.....	3	3	.....	.....	.....	.....	15	19	.....	.....	.....
English Bible: History, Poetry, Prophecies	8	8	8	1	1	1	.....	.....	.....	10	15	15	.....	.....	.....
The Drama to the Closing of the Theaters	10	10	10	3	3	3	.....	.....	.....	9	9	8	.....	.....	.....
The Modern Novel	11	11	.....	3	3	.....	.....	.....	.....	14	15	.....	.....	.....	.....
Chaucer	13	.....	.....	3	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....
Milton .....	.....	14	.....	.....	3	.....	.....	.....	.....	.....	7	.....	.....	.....	.....
Masterpieces	17	17	17	3	3	3	.....	.....	.....	5	3	3	.....	.....	.....
Victorian Literature	18	18	18	2	2	2	.....	.....	.....	10	16	17	.....	.....	.....
Current Literature	19	19	19	2	2	2	.....	.....	.....	3	6	5	.....	.....	.....
Development of Literary Types	22	22	22	1	1	1	.....	.....	.....	1	1	1	.....	.....	.....
Thesis Course	23	23	23	2	1	1	.....	.....	.....	2	1	1	.....	.....	.....
The Age of Johnson .....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	28	.....	.....	.....	.....
American Authors .....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	28	.....	.....	.....	.....
Modern Plays .....	.....	15	.....	.....	.....	3	.....	.....	.....	.....	28	.....	.....	.....	.....
European History.															
Middle Ages	1	.....	.....	6	.....	.....	.....	.....	.....	55	.....	.....	.....	.....	.....
Renaissance .....	.....	2	.....	.....	6	.....	.....	.....	.....	.....	53	.....	.....	.....	.....
Modern European History .....	.....	3	.....	.....	.....	6	.....	.....	.....	.....	52	.....	.....	.....	.....
English Constitutional History	4	4	4	3	3	3	.....	.....	.....	17	15	13	.....	.....	.....
Reformation History	7	.....	.....	3	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....
French Revolution and Napoleonic Era .....	.....	8	.....	.....	3	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Nineteenth Century History .....	.....	9	.....	.....	3	.....	.....	.....	.....	.....	7	.....	.....	.....	.....
English Narrative History	14	14	14	3	3	3	.....	.....	.....	14	13	15	.....	.....	.....
Greek History	5	.....	.....	2	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....
Roman History .....	.....	6	6	.....	2	2	.....	.....	.....	.....	5	5	.....	.....	.....

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Geology.												
General Geology	2			4			8			45		
Inorganic Geology	11			3			1½			13		
Historical Geology	14	12			3			1		13		
Paleontology	14											
Advanced Historical Geology	16						10	6	6	1	1	
Physiography	17						10					
Petrography	19			3	3	3				17	20	15
Research Work	20						4	4	4	1	1	1
Elementary Geology	4						1		1	1	1	1
Economic Geology	4	5						1½		5		
Economic Geology	6				3			1		11		
Petrography	7				1					7		
Physiography	7					5						
Field Geology	13								20			26
												16
Germanic Languages and Literatures.												
Elementary German	1	1	1	24	24	20				219	184	150
Science Reading	2	2	2	8	8	8				40	33	26
Intermediate German	4	4	4	8	8	8				72	61	60
Classical Drama and Prose	9	9	9	3	3	3				32	34	25
Faust	11	11	11	2	2	2				4	5	4
Colloquial Exercises	12	12	12	2	2	2				7	8	5
Deutscher Aufsatz	13	13	13	1	1	1				5	5	8
Old Norse	17			2						1		
Sanskrit	20	20	20	2	2	2				1	1	1
Phonetics	21			1						3		
Special										1	1	1
Special										1	1	1
Greek.												
Xenophon: Hellenica	7			4						17		
Herodotus: Greek History		8			4						15	
Homer: Odyssey			9			4						16
Lysias: Eight Orations	10			3						14		
Plato: Apology, Crito, Phaedo		11			3						13	
Homer: Iliad			12			3						12
Thucydides	13			3						6		
Demosthenes		14			3						5	
Attic Tragedy: Lectures	16			2						12		
Sophocles: Oedipus Tyrannus		17			2						11	
Euripides: Iphigenia in Tauris			18			2						8
Epic Poetry: Hesiod's Works and Days	19			3						2		
Post Classical Greek: Lucian Dio Chrysostom		20			3						2	
Aristophanes: Birds			21			3						6
Greek Philosophy: Lectures	25			2						3		
Plato: Protagoras		26			2						3	
Xenophon: Memorabilia			27			2						6
Elementary Greek	1	1	1	4	4	4				9	8	8
Horticulture and Forestry.												
Elements of Horticulture	1			3			3			32		
Vegetable Forcing		2			3			3			11	
Plant Propagation			3			6			6			26
Varieties of Cultivated Fruit	5			3			3			6		
Principles of Fruit Culture		6			3			3			7	
Small Fruit Culture			7			3			3			6
Olericulture	11			1			3			6		
Sylviculture and Forestry		12			2			2			5	
Landscape Gardening			13			2			2			2
Elements of Floriculture	8			1			3			12		
Window Gardening		9			2			2			10	
Ornamental and Kitchen Gardening			10			2			2			8
Thesis							3	4	2	2	2	2

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Industrial Arts.												
Tools and Machines	1	1	1	3	3	3	...	...	...	4	4	3
Machine Drawing	8	2	...	...	...	...	6	...	...	4	...	...
Designing .....	...	2	7	...	...	...	...	6	6	...	4	3
Workshop Appliances .....	...	...	...	...	3	...	...	...	...	...	...	17
Machine Design .....	...	...	...	...	...	...	...	6	...	...	...	23
Shopwork—												
Carpentry and Pattern Making	1	1	1	...	...	...	6	6	6	26	18	5
Forging	2	2	2	...	...	...	4	6	6	43	29	1
Foundry Work	3	...	...	...	...	...	6	...	...	49	...	...
Foundry Work .....	...	...	...	...	...	...	...	...	...	2	...	...
Chipping and Filing	4	4	4	...	...	...	6	6	6	52	25	23
Chipping and Filing	7	7	7	...	...	...	4	6	6	6	...	...
Carpentry and Pattern Making	9	9	9	...	...	...	6	6	6	40	11	23
Advanced Pattern Making .....	...	...	...	...	...	...	6	6	6	7	32	5
Advanced Pattern Making	11	...	...	...	...	...	6	4	6	...	6	...
Forging	11	11	11	...	...	...	6	6	6	14	47	42
Forging .....	...	12	...	...	...	...	...	6	...	...	...	4
Machine Work	13	13	13	...	...	...	6	6	6	5	36	31
Machine Work	14	14	14	...	...	...	6	6	6	24	1	7
Advanced Machine Work	15	15	...	...	...	...	8	8	...	2	16	...
Advanced Machine Work .....	...	16	...	...	...	...	6	...	...	...	2	...
Summer Term—												
Chipping and Filing	4	...	...	...	...	...	36	...	...	18	...	...
Carpentry and Pattern Making	7	...	...	...	...	...	36	...	...	37	...	...
Forging	11	...	...	...	...	...	36	...	...	37	...	...
Machine Work	13	...	...	...	...	...	18	...	...	5	...	...
Machine Work	14	...	...	...	...	...	20	...	...	11	...	...
Advanced Machine Work	15	...	...	...	...	...	20	...	...	14	...	...
Latin.												
Cicero: De Senectute and De Amicitia....	1	...	12	...	...	...	...	...	...	54	...	...
Livy: Book 21 or Book 22	2	...	...	12	...	...	...	...	...	50	...	...
Horace: Odes and Epodes .....	...	3	...	12	...	...	...	...	...	...	43	...
Pliny: Selected Letters	4	...	6	...	...	...	...	...	...	34	...	...
Tacitus: Germania and Agricola	5	...	6	...	...	...	...	...	...	27	...	...
Horace: Odes and Epodes .....	...	6	...	6	...	...	...	...	...	...	26	...
Plautus: Petronius	10	...	3	...	...	...	...	...	...	8	...	...
Cicero: De Finibus	11	...	3	...	...	...	...	...	...	9	...	...
Seneca's Dialogues .....	...	12	...	3	...	...	...	...	...	...	7	...
Horace: Epistles, Books I and II	16	...	3	...	...	...	...	...	...	6	...	...
Latin Hymns	17	...	3	...	...	...	...	...	...	5	...	...
Quintilian, Book X .....	...	17a	...	3	...	...	...	...	...	...	5	...
Teachers' Course (Caesar)	18	...	3	...	...	...	...	...	...	6	...	...
Teachers' Course (Cicero)	18	...	3	...	...	...	...	...	...	5	...	...
Teachers' Course (Vergil) .....	...	18	...	3	...	...	...	...	...	...	6	...
Antiquities (Private Life)	20	20	2	2	2	...	...	...	...	19	17	16
Pro-Seminary (Horace)	25	...	3	...	...	...	...	...	...	3	...	...
Pro-Seminary (Persius)	25	...	3	...	...	...	...	...	...	3	...	...
Pro-Seminary (Juvenal) .....	...	25	...	3	...	...	...	...	...	...	2	...
Law.												
(Semester Work.)												
Elementary Law .....	...	...	15	...	...	...	...	...	...	57	...	...
Bailments .....	...	...	2	...	...	...	...	...	...	41	...	...
Commercial Law .....	...	...	5	...	...	...	...	...	...	40	...	...
Evidence .....	...	...	3	3	...	...	...	...	...	40	39	...

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Law—Concluded. (Semester Work.)												
Pleading				4	2					44	41	...
Moot Court (second year)				1	1					40	39	...
Constitutional Law										53	...	...
International Law				4						56	...	...
Corporations, Private				3	2					54	46	...
Corporations, Municipal				3						56	...	...
Equity Jurisprudence				4						55	...	...
Probate Law				3						57	...	...
Moot Court (third year)				1	1					58	46	...
Agency					2						42	...
Contracts					4						46	...
Criminal Law					3						40	...
Sales					3						44	...
Torts					4						40	...
Partnership					3						42	...
Real Property					5						41	...
Wills					3						42	...
Federal Practice					2						45	...
Trial Practice					2						42	...
Quasi-Contracts					2						43	...
Ethics					2						41	...
Suretyship					2						45	...
Graduate Course—												
History of Common Law				3						7	...	...
American Constitutional History				3	3					3	3	...
Public International Law				2	2					2	2	...
History of Treaties .....												...
Cases in Evidence				1	1					7	8	...
Remedies and Remedial Rights				1	1					6	7	...
Private Corporations—Cases				2						7	...	...
General Jurisprudence					1						8	...
Cases in Equity					2						7	...
Law of Receivers					1						5	...
Real Property, Advanced					1						5	...
Mathematics.												
Algebra, College	31			50						305	...	...
Algebra, College	21			9						82	...	...
Algebra, Elementary	1			5						20	...	...
Trigonometry		32	14		50	5					250	25
Trigonometry		22			9						67	...
Analytics			33		50						245	...
Analytics			23		9						63	...
Calculus	41	42	43	30	30	30				165	149	144
Calculus and Analytics	28	28	28	3	3	3				5	5	5
Mechanics	71	72	73	18	20	20				84	84	82
Geometry, Plane	3	3a		5	5					24	23	...
Geometry, Solid		13			5						27	...
Differential Equations	11			1						28	...	...
Problems on Past Work	24	24	24	1	1	1				6	6	6
Higher Electives in Mathematics	25	25	25	15	15	15				10	10	9
Mechanical Engineering.												
Mechanism		3	3		10				4		49	19
Machine Design	18	18	19	5	5				10	21	20	18
Thesis	21	21	21						10	19	18	17
Timber and Masonry		22			3						19	...

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Mechanical Engineering—Concluded.												
Materials of Construction	23	...	...	2	...	...	4	...	...	1	...	...
Steam Machinery	26	...	...	1	...	...	...	...	...	46	...	...
Hydraulic Machinery .....	...	31	...	...	3	...	...	...	...	...	17	...
Mechanical Engineering of Power Plants .....	...	32	...	...	10	...	...	...	...	...	43	...
Steam Engines and Boilers	33	...	...	5	...	...	...	...	...	26	...	...
Thermodynamics .....	...	34	...	5	...	...	...	...	...	20	...	...
Experimental Engineering	12	...	...	...	...	...	4	...	...	19	...	...
Experimental Engineering	27	14	15	...	...	...	10	8	6	18	17	17
Experimental Engineering	25	17	25	1	1	...	8	4	8	1	12	21
Experimental Engineering	28	...	...	...	...	...	4	...	...	1	...	...
Experimental Engineering	29	30	28	...	...	...	6	4	4	10	8	23
Experimental Gas Engineering .....	...	...	...	...	...	...	8	...	...	2	...	...
Metallurgy and Mineralogy.												
Metallurgy	4	4	...	5	5	...	...	...	...	40	34	...
Mineralogy .....	...	...	2	...	...	3	...	...	...	...	37	...
Metallurgical Laboratory	5	5	5	2	1	1	21	21	21	25	21	21
Ore Dressing and Coal Washing	8	...	...	2	...	...	...	...	...	6	...	...
Determinative Mineralogy .....	...	3	...	...	1	...	...	10	...	...	8	...
Metallurgical Construction	7	...	...	1	...	...	6	...	...	8	...	...
Mineral Chemistry .....	...	9	...	...	5	...	...	...	...	10	...	...
Metallurgy Thesis .....	...	...	...	...	...	...	2	...	...	4	...	...
Military Science.												
Practical Military Work .....	...	...	...	4	2	4	...	...	...	933	638	508
Theoretical Military Work .....	...	...	...	1	...	...	...	...	...	89	...	...
Mine Engineering.												
Mathematics: Elementary Algebra	2	2	2	5	5	5	...	...	...	30	29	27
Mine Engineering	5	5	5	5	5	5	...	...	...	7	8	8
Mine Surveying	4	...	...	4	...	...	8	...	...	13	...	...
Mine Surveying	1	...	...	5	...	...	8	...	...	6	...	...
Ventilation and Haulage .....	...	2	...	5	...	...	...	2	...	...	7	...
Mine Operating .....	...	3	...	...	5	...	...	2	...	...	7	...
Surveying	7	...	...	...	...	...	6	...	...	11	...	...
Plans and Specifications .....	...	6	...	...	3	...	6	...	...	...	7	...
Metallurgical Construction	7	...	...	1	...	...	6	...	...	7	...	...
Pharmacy.												
General Pharmaceutical Processes	6	...	...	3	...	...	...	...	...	26	...	...
United States Pharmacopoeia Official Preparations .....	...	7	...	2	...	...	10	...	...	23	...	...
Dispensatories .....	...	8	...	2	2	...	10	10	...	...	22	...
Pharmaceutical Chemistry	9	...	...	2	...	...	10	...	...	7	...	...
General Practice .....	...	11	...	2	2	...	10	10	...	...	8	...
Extemporaneous Pharmacy	10	...	...	2	...	...	10	...	...	8	...	...
Materia Medica	12	13	14	3	3	3	...	...	...	19	18	17
Pharmaceutical Assaying	15	...	...	2	...	...	10	...	...	3	...	...
Methods of Manufacture .....	...	16	...	2	...	...	10	...	...	3	...	...
General Pharmacy .....	...	17	...	2	2	...	10	10	...	...	3	...
Pharmacy Special .....	...	2	2	2	2	10	10	10	...	1	1	1
Pharmaceutical Latin	26	26	26	4	4	4	...	...	...	18	17	16

TABLE No. I—Continued.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Philosophy.												
Psychology, General	15			3						35		
Psychology, General	18	18		3	3					22	21	
Logic, General	19			3						22		
Logic	16			3	3						30	
Ethics	20			3						7		
History of Philosophy, Ancient and Medieval	22			3						2		
History of Philosophy, Ancient and Modern	21			3	3						9	
Psychology, Advanced	25	26		3						3	4	
Psychology, Experimental	29	29		1	1					3	4	
Psychology, Abnormal	42	42								1	1	
Psychology, Seminary	39	39								1	1	
Plato	31	31								1	1	
Esthetics	45	45								3	3	
Philosophy of Religion	28	28								2	2	
Advanced Ethics	44	44								2	2	
Science of Religion (Minor for A. M.)				1	1					1	1	
Physical Education—For Men.												
Physical Examinations & Measurements							40	54		500	500	
Physical Education—For Women.												
Physical Education							14	14	14	98	91	80
Physics.												
Elementary Physics	1	1	1	10	10	10				114	72	
Mechanics and Heat	2	2	2	9	8	8				188	161	130
Physics Problems	3	3	3	9	9	6				66	56	45
Electricity and Magnetism	4			3						29		
Physical Laboratory	5		5				6-8			30	2	37
Physical Laboratory	6	6					9			27	25	
Physical Laboratory	7	7					6	24		24	1	24
General Physics	11	11	11		1	1	8	8	8	20	20	17
Physical Laboratory	12	12	12				6-9	6	6	6	4	3
Theoretical Physics	14	14	14	2	2	2				1	2	2
Advanced Physical Laboratory	15	15	15				9	9	9	1	1	1
Physical Laboratory	15	9								6		3
Advanced Physical Laboratory	13	13						9	9		2	1
Rhetoric and English Language.												
Paragraph Writing and Analysis of Prose	1	1	1	2	2	2				528	427	367
Expository Writing	2			2						204		
Brief Making and Written Argumentation		3	3		2	2					183	165
Short Story Writing	4			3						18		
Poetics		6			3						13	
Theories of Style			8			3						15
Advanced Composition	10	10	10	1	1	1				13	12	14
Problems in Rhetoric and Criticism	12	12	12	2	2	2				12	12	12
The Teaching of English	13	13	13	1	1	1				8	7	7
History of English and Development of Prose	15	15	15	2	2	2				15	15	15
Old English Prose and Poetry	16	16	16	2	2	2				9	9	9
Beginning of English Story	17	17	17	2	2	2						
Graduate Courses	20	20	20	2	2	2				5	5	5
Essentials of Oral Discourse	21	21	21	1	1	1				357	338	291
Declamations	22	22	22	2	2	2				5	4	3
Debates	23	23		2	2					7	7	
Extempore Speaking		24		2	2	2						9
Oratory	25	25	25	2	2	2				7	7	6

TABLE No. I—Concluded.

Course Subjects.	Department Number.			Total Hours per Week.						Number of Students.		
				Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Romance Languages.												
French—												
Seminary	14	14	14	2	2	2				5	5	5
Travel Writers	11	11	11	2	2	2				14	11	11
XVIIIth Century Prose		12		2	2	2					11	11
Advanced Conversational Practice			12	2	2	2					17	19
Advanced Prose Composition	7	7	7	1	1	1				17	17	15
Comedy	4			2	2	2				22	21	21
Tragedy				2	2	2					21	21
XVIIIth Century Prose		5	6	2	2	2					23	23
Science Reading	3	3	3	4	4	4				3	4	3
Modern Literature	2	2	2	8	8	8				75	70	65
Elementary	1	1	1	20	20	20				202	171	138
Italian—												
Elementary	1	1	1	2	2	2				6	4	4
Spanish—												
Advanced	2	2	2	2	2	2				7	6	6
Elementary	1	1	1	8	8	8				75	56	55
Veterinary Medicine.												
Veterinary Anatomy	11	12	13	5	5	5	10	10	10	34	34	26
Pharmacy	12	13	13	5	5	5				37	39	39
General and Special Pathology	14	15	16	5	5	5				37	39	39
Clinic	19	19	19				12	12		11	50	55
General Surgery	24			2						41		
Veterinary Anatomy	37						12			36		
Special Pathology	21	21		3	2					11	11	12
Special Surgery (a)	18		18	3						12		12
Special Surgery (b)		18	18		3	3					40	39
Horse Shoeing	26			3						13		
Pathology Laboratory	36	34	34				6	6		10	42	41
Operative Surgical Practice		25									10	
Meat Inspection		27			3						11	
Canine Diseases		31			5						11	
Veterinary Medicine for Agricultural Students	28	29	30	3	3		3	3		12	14	11
Veterinary Medicine for Dairy Students		17								42		
Obstetrics			23			3						11
Zoology and Entomology.												
Zoology, General Invertebrate and vertebrate	1	1	1	4	4	4	13	14	14	107	77	72
Comparative Anatomy of Vertebrates	2	2	2	1	1	1	8	8	8	7	8	8
Economic Entomology	4	4	4	1	1	1	6	6	6	16	13	13
Entomology: Household Insects	5			3						4		
Parasites of Domestic Animals	8			1						8		
Special Entomology	9	10	11		1	1		10		2	2	1
Invertebrate Morphology	15	16	17	1	1	1	8	8	8	2	3	1
Embryology	19	20	20	1	1	1	8	8	8	9	9	9
Entomology: Advanced	23	23	23	1	1	1	8	8	8	5	5	5
Ornithology	24	24	24	1	1	1	2	2	2	3	3	4
Research Work	25	25	25				10	10	10	9	9	8
Embryology of Frog		14							6			2
Horticultural Entomology			3			1			3			1

TABLE II—SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY.

	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Bachelor of arts	1	1	6	2	2	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18	8	14	16	6	16
Bachelor of philosophy				2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bachelor of science	5	5	1	2	5	2	2	4	2	4	4	8	2	10	7	11	7	9	4	10	27	31	38	37	37	37
Bachelor of science in agriculture				2				1	1				2	3	3			2	4	4	5	5	7	6	9	9
Bachelor of science in chemistry																						1	1	7	5	3
Bachelor of science in D. Science																		1	1	1	2	1	1	6	2	2
Bachelor of science in H. F.																				1	1					
Bachelor of science, I. Arts																				1			1	1	3	
Bachelor of science in pharmacy						1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8	7	3	10	11	14
Civil engineer																										1
Civil Engineer in Architecture																										1
Mechanical engineer			1		2	4	1	3	1	2	4	2	3	2	5	2	3	15	17	13	10	6	9	6	11	17
Electrical engineer															4	9	8	15	17	13	10	7	11	4	6	8
Engineer of mines			1	1			1	2	4	1	4	2			1	1	4	1	6	3	2	2	3	2	6	7
Engineer of mines, in ceramics																										
Graduate in pharmacy									3			2	3	6	5	5	3	11	12	11	7					
Master of pharmacy																		1	2		1					
Doctor of veterinary medicine										1		1	4		4	5		4	2	3			4	4	2	8
Master of arts												1	1	1	2			2	3	4	4	3	8	6	9	14
Master of science				1								1	1	2	2		2	3	3	2	3	3	2	1	1	
Master of agriculture																	1	2		1						
Master of science in H. and F.																				1	1					
Doctor of philosophy		1															1								1	
Doctor of science													1					1		1						
Bachelor of laws														9	18	15	16	6	23	22	21	25	17	26	20	
Master of laws															2	4	2		6							2
Totals	6	7	9	8	9	11	12	16	18	24	28	26	30	36	65	79	70	112	118	135	126	99	137	135	141	171

TABLE III—SHOWING THE NUMBER OF STUDENTS IN THE GENERAL TECHNICAL AND PROFESSIONAL COURSES.

	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.
General Courses (College of Arts).....	137	151	194	245	256	322	327	358	371	419	439	403	490
Technical Courses (other Colleges, except Law).....	166	259	381	368	424	453	453	511	541	603	771	888	1,039
Professional Courses (College of Law)		55	67	72	65	100	132	148	191	201	220	188	166
*Graduate students and summer school.....	2	.....	.....	1	.....	94	97	133	75	45	51	49	62
Totals.....	305	465	642	686	745	969	1,019	1,150	1,178	1,268	1,481	1,528	1,757

* Until 1896, graduate students have been included in the first three classes.

REPORT OF THE LIBRARIAN.

JULY 23rd, 1903.

DR. W. O. THOMPSON, *President Ohio State University,*

DEAR SIR:

I have the honor to submit to you my report as librarian for the year ending June 30th, 1903.

The number of books recorded on the accession book of the library is 48,223, being an increase of 3,700 over the number reported last year. This number does not represent the actual additions to the library during the last year as a large number of the books have not yet been accessioned. In round numbers the library may be said to contain fifty thousand bound volumes.

Ten years have passed since the library was moved into the rooms it now occupies in Orton Hall. In 1893 it contained 13,000 books. It has added 37,000 volumes during the decade. Looked at from the point of view of the quality of the books, this has been a strong and healthy growth. From the point of view of quantity, it is by no means what it should have been. To look forward to having in the library but 87,000 well selected books at the end of another decade would be a gloomy outlook and one seriously menacing the proper development of the university. I most earnestly recommend that it be a decided policy of the university to increase the book appropriation to the extent that at the end of another decade the library may be at least three times as large as it is at present.

The gifts of the year have been, as heretofore, an important part of the library's increase. A list of the donors is appended. The list shows that we have continued to receive documents from our National government, state and municipal governments and also from many societies both in this country and abroad. The following gifts require special attention.

Mr. Outhwaite has continued his generosity, his most notable gift of the year being the collection of Alabama Documents of the time of the Civil War. It is his intention to complete these documents so that his collection may have the complete official records of one confederate state.

Mr. John and Mr. Louis Siebert have each given \$100 to be credited to the Siebert Fund for books on German History. It is the understanding that each year there will be the sum of \$200 to be expended for this collection. No purchases have been made this year owing to the illness of Professor Siebert.

The library has been specially grateful to Mrs. L. B. Wing for having gathered together all the agricultural papers and reports which Mr. Wing had been collecting since 1850, and for having given them to the university with complete freedom as to their disposal. Many of these papers will be useful in completing the files of papers and reports now in the library and the privilege of using them is a great one.

Mr. Fred Butcher, a graduate of the class of 1901 now connected with the Kilbourne-Jacobs Company, has begun the collection of the journals received by that company, and sending them regularly to the university library. These journals consist mainly of trade journals which are of interest not only to the students in the technical departments, but also to those interested in the courses bearing upon commerce and industry. The library sends a student each week to get these papers. There is no doubt but that other companies in the city would be glad to co-operate with the university in the preservation of such journals. The only difficulty at present is the lack of means for collecting them.

The most notable gift of the year has been the gift of the pedagogical library of Dr. Emerson Elbridge White. During his long and active life Dr. White as editor of educational periodicals, as the author of text books, as an instigator of educational movements and reforms, had acquired much material in the line of educational publications, all of which, down to the smallest pamphlet, he carefully preserved. Through the personal friendship of Dr. White's family for Dr. W. O. Thompson, President of the Ohio State University, this valuable collection has come to us. There were claims from other states. Dr. White had been President of Purdue in Indiana; his son is governor of West Virginia with a natural interest in her state institution, and it is a matter for congratulation that this collection is not to go outside of Ohio. The Board of Trustees has ordered a special book plate from Mr. J. Winferd Spenceley.

Mrs. Eliza Haines of Waynesville, Ohio, has within the last week presented to the university the main part of the library of her son, James W. Haines. This is a large gift, amounting to 996 bound volumes and 27 pamphlets. Many of the books are medical and will form an excellent foundation for our medical library when we are ready to establish one.

The system of exchange, which was inaugurated several years since by the library, has proved to be admirable in its workings and is securing to us many valuable contributions.

An important step in the library's development took place when the Board of Trustees on the recommendation of the Library Council passed the following resolutions:

1. The library shall consist of all books, magazines, papers, pamphlets, or maps, purchased with university money or acquired by the university or any of its departments through appropriations by the board, by gift or by exchange.

2. All books, magazines, papers, pamphlets and maps, owned by the university and in the possession of various departments shall be recorded and catalogued by the librarian.

By this action, all questions as to what the university library really is has been settled. It cannot be looked upon as one special collection of books housed in one special spot. It is something greater than that. It exists because the library exists and because the university owns books, maps and charts, and the university library consists of all books, maps and charts belonging to the university, irrespective of college or department.

The work involved in gathering a complete list of all the university's property of this character and of properly cataloguing the same is by no means a light one and will have to progress slowly.

The Law Library is at last permanently settled in Page Hall. The east reading room gives ample accommodations for readers and books for the present. The furniture, which is the first permanent equipment which the library has secured, is of heavy solid oak, simple and rich in design. The small room leading off of the reading room is used for students needing the privilege of talking over cases.

The need of a building for the general library is pressing. It would be a mere repetition of former reports to dwell upon this subject. Unless some relief can be secured in the near future, the library will be placed in a position where it will be exceedingly hard to be of value to either students or professors.

One point in connection with the building I wish to make especially prominent, and that is that it would be better, far better, for the library to be crowded even beyond the point mentioned above, than to begin the erection of a building without sufficient money to plan largely. The action of other universities in erecting library buildings of dignity and elegance, is an example which the Ohio State University should follow. This is said with the

distinct understanding that only part of the building would be erected first. The plans as they are now being designed give opportunity for almost unlimited expansion, yet the nucleus of this building ought not to be begun on less than \$300,000.

As has been said in previous reports the accession department of the library has been for several years well organized. The reference department has had a rather precarious existence. It has been in the hands of several people, the last change coming unexpectedly at the beginning of this college year when Mr. Frank Bohn resigned his position to accept a fellowship in the University of Michigan. His resignation, coming as it did after the first month of the library year had begun, made it hard to adjust matters, but it is now felt that a very satisfactory arrangement was made. It was decided to organize the reference department immediately along lines which had long been kept in mind, namely, to unite in that department all work tending to make the library accessible to readers. This includes classifying, shelf listing, cataloguing, as well as reference work proper. In many libraries there is a distinct line drawn between these two phases of work, but it is now generally being recognized that the cataloguer can do better work in cataloguing if he is kept in contact with the needs of the public, and the reference assistant should not be deprived of the knowledge of the book which would come to him through time spent on the classifying and cataloguing.

In charge of this department, as thus formed, was placed Miss Maud D. Jeffrey who had given good service as a cataloguer and classifier, and with her as reference assistant was placed Miss Martha Hartford. Miss Hartford had just graduated from the Ohio State University, but during her junior and senior years she made a special study of library work in the University Library, studying those lines of work which specially qualified her to take this position. Her work during the year has proved the wisdom of her appointment.

Mr. Carl Eckhart who had served as library fellow last year and had been re-appointed for this year resigned the first of September and Mr. John C. Cone, a senior in the University, was given his place. It was the intention to keep this position post-graduate in character but owing to the necessity of quickly filling the position made vacant by Mr. Eckhardt, it was necessary to appoint an under-graduate. Mr. Cone's work has been satisfactory. He has been elected for the same position next year.

Very respectfully,

OLIVE JONES, *Librarian.*

ANNUAL REPORT

—OF—

F. W. PRENTISS, Treasurer

—OF THE—

OHIO STATE UNIVERSITY

JUNE 30, 1903

REPORT OF THE TREASURER.

COLUMBUS, OHIO, June 30, 1903.

To the Board of Trustees of the Ohio State University, Columbus, Ohio:

GENTLEMEN:—I have the honor to submit my report of the receipts and disbursements from the treasury of the Ohio State University for the fiscal year ending June thirtieth, nineteen hundred and three, accompanied by vouchers for each disbursement.

Respectfully,

F. W. PRENTISS,

Treasurer.

DETAILED
STATEMENT OF RECEIPTS

—BY—

F. W. PRENTISS, Treasurer

DETAILED STATEMENT OF RECEIPTS.

Date.	From whom received.	From what source.	No.	Amount.
July 1	L. F. Kiesewetter	Bal. in his hands as Treasurer, June 30th, 1902	1	\$13,830 71
	Auditor of State	Req. No. 71, building levy	2	3,769 19
2	J. G. Haas, agt.	Rents and profits received from Ill. lands devised by Page will, since death of Charlotte G. Page	3	12,626 30
18	Treasurer U. S. A.	App. act of August 30th, 1890	4	25,000 00
Aug. 18	Auditor of State	Req. No. 72, building levy	5	3,798 10
	Auditor of State	Req. No. 73, building levy		993 88
	F. E. Sanborn	Shop deposits		22 06
Sept. 5	Auditor of State	Req. No. 74, building levy	6	6,578 75
	Auditor of State	Req. No. 75, building levy		3,651 24
8	Com. Sinking Fund	Int. on endowment	7	5,500 00
	C. P. Linhart	Lost towels		2 35
	M. Dresbach	Laboratory fees		7 50
Oct. 1	H. C. Lord	Rent	8	30 00
	E. A. Eggers	Ground rent		112 50
	H. Osborn	Fees, lake laboratory		380 00
	A. Cope	Store room cards		2,060 00
	Nancy McConnell	Deed, act March 14, 1889..		2 00
	D. J. Splane	Deed, act March 14, 1889..		2 00
	B. F. Carmean	Deed, act March 14, 1889..		2 00
	Mary Barton	Diploma fee		10 00
18	Com. Sinking Fund	Int. on endowment	9	3,500 00
	Auditor of State	Req. No. 76, O. S. U. fund		6,354 94
	Auditor of State	Req. No. 77, O. S. U. fund		7,950 45
	Auditor of State	Req. No. 78, building levy.		6,776 89
	L. C. Britton	Diploma fee		5 00
	W. McPherson	Rent		36 00
	D. H. Burrell & Co.	Money refunded m a/c....		5 00
	A. Cope, bursar	Students' fees		10,000 00
Nov. 6	Auditor of State	Req. No. 79, building levy.	10	13,361 31
	Auditor of State	Req. No. 80, O. S. U. levy.		20,100 47
	Com. Sinking Fund	Int. on endowment		2,000 00
	G. B. Kauffman	Rent		225 00
	Emerson McMillan	Fellowship endowment ...		337 50
Oct. 11	S. W. Robinson	Endowment Robinson Fellowship, mechanical engineering	11	2,500 00
Nov. 19	Auditor of State	Req. No. 81, O. S. U. fund.	12	31,525 00
21	Com. Sinking Fund	Int. on endowment	13	2,000 00
	A. Cope, secty.	Store room cards		1,000 00
	A. Cope, bursar	Students' fees		6,000 00
	A. Cope, bursar	Students' fees, 1901-1902 ..		413 49
	A. Cope, bursar	Fees grad. school agri. ..		307 95
	Univ. State of New York	Overpayment of bill		2 50
Dec. 1	Ohio National Bank ..	Sale of refunding bonds..	14	32,750 00
4	Auditor of State	Req. No. 82, building levy.	15	8,981 51
15	Com. Sinking Fund	Int. on endowment	16	2,000 00
18	Req. on Auditor of State	Req. No. 83, O. S. U. fund.	17	19,842 13
	Req. on Auditor of State	Req. No. 84, O. S. U. fund..		6,842 64
23	J. E. Bender, clerk	Fees vet. clinic	18	260 15
	H. C. Lord	Rent		60 00
	G. L. Converse	Equipment lost		16 10
	Nat'l Brick Mfg. Ass. ..	Scholarship		250 00
	W. McPherson	Rent		108 00

DETAILED STATEMENT OF RECEIPTS—Continued.

Date.	From whom received.	From what source.	No.	Amount.
27	Auditor of State	Req. No. 85	19	2,743 06
	Auditor of State	Req. No. 86		9,595 00
30	Auditor of State	Req. No. 87, O. S. U. fund.	20	2,500 00
31	Com. Sinking Fund	Int. endowment	21	2,044 96
Jan. 17	A. Cope	Store room cards	22	662 28
21	Auditor of State	Req. No. 88, O. S. U. levy.	23	20,127 13
	B. F. Thomas	Rent		127 50
	A. Cope, bursar	Students' fees		8,000 00
28	Prof. S. W. Robinson ...	Endowment of fellowship in College of Engineering	24	2,500 00
Feb. 2	Auditor of State	Req. No. 89, building levy.	25	6,283 00
	Auditor of State	Req. No. 90, O. S. U. levy..		13,588 70
	J. G. Haas, rec.	Rents and profits from lands devised by will of H. F. Page	26	15,085 44
14	A. Cope, secty.	Store room cards	27	646 45
	Com. Sinking Fund	Int. on endowment		3,000 00
	H. C. Lord	Rent		60 00
	E. Orton, Jr.	Coal		6 20
28	Auditor of State	Req. No. 91	28	20,433 79
	M. A. Seeds Plate Co. ..	Freight allowance		60
	G. B. Kauffman	Rent		225 00
	C. W. Mesloh	Rent		54 00
	McMaster & Fletcher ...	Conduit		26 75
	H. C. Lord	Rent		60 00
	J. E. Bender	Hospital clinic		198 25
Mch. 21	B. F. Thomas	Rent	29	150 00
	A. Cope, bursar	Students' fees		5,000 00
	Com. Sinking Fund	Int. on endowment		4,500 00
	A. Cope, secty.	Store room cards		268 75
April 2	Auditor of State	Req. No. 92, O. S. U. levy..	30	20,353 79
	Auditor of State	Req. No. 93, O. S. U. levy..		12,339 03
	C. W. Mesloh	Rent		162 00
	W. McPherson	Rent		108 00
	E. A. Eggers	Rent		37 50
	H. C. Lord	Rent		30 00
	G. Feick	Motor		520 00
	F. E. Fleischer	Broken glass		50
18	A. Cope, secty.	Store room cards	31	460 00
	J. E. Bender	Fees vet. clinic		116 90
	B. F. Thomas	Rent		150 00
	N. L. Hayden Mfg. Co. ..	Use of boiler		50 00
	A. Cope, bursar	Students' fees		7,000 00
May 6	Auditor of State	Req. No. 95, O. S. U. levy.	32	20,594 97
	Auditor of State	Req. No. 96, building levy		16,577 50
	H. C. Lord	Rent		60 00
	Cols. Water Works	Rebate		3 00
	J. E. Bender	Vet. clinic fees		87 75
	J. E. Bender	Vet clinic fees		79 45
8	A. Cope, secty.	Store room cards	33	375 90
	Com. Sinking Fund	Int. on endowment		3,500 00
	W. McPherson	Rent		108 00
18	L. F. Kiesewetter	Himself and others for en- dowment of C. N. Brown scholarship	34	1,000 00

DETAILED STATEMENT OF RECEIPTS—Concluded.

Date.	From whom received.	From what source.	No.	Amount.
28	Auditor of State	Req. No. 97, O. S. U. levy.	34	15,856 10
	A. Cope, bursar	Students' fees		4,000 00
	Com. Sinking Fund	Int. on endowment		2,500 00
	Ohio S. & S. Home	Use of fireman		11 69
June 1	Hayden-Clinton National Bank	Sale of refunding bonds..	36	10,922 00
3	Auditor of State	Req. No. 98, O. S. U. levy.	37	5,962 50
	Auditor of State	Req. No. 99, O. S. U. levy.		19,930 47
	Auditor of State	Req. No. 100 building levy		15,255 00
22	A. Cope, secty.	Diploma fees	38	840 00
	A. Cope, secty.	Summer shop fees		460 00
	A. Cope, bursar	Students' fees		1,000 00
	J. E. Bender	Hospital fees		372 14
	J. Siebert	Siebert library fund		100 00
	C. W. Mesloh	Rent		108 00
	J. Siebert	Siebert library fund		100 00
29	Com. Sinking Fund	Int. on endowment	39	3,525 95
	A. Cope, secty.	Diploma fees		90 00
	A. Cope, bursar	Summer shop fees		45 00
	J. A. Bownocker	Com. luncheon		88 00
	C. G. Souder, treas.	Class assessment		30 00
	A. Cope, secty.	Store room cards		246 40
		Total receipts		\$546,935 04

DETAILED
STATEMENT OF DISBURSEMENTS

—BY—

F. W. PRENTISS, Treasurer

DETAILED STATEMENT OF DISBURSEMENTS.

Date.	To whom paid.	For what purpose.	No.	Amount.
July 1	The Bookkeeper Pub. Co.	Encyclopedia	1	\$8 00
26	W. O. Thompson	July salary inst.	2	416 67
26	Alexis Cope	July salary inst.	3	187 50
26	Carl E. Steeb	July salary inst.	4	83 33
26	K. H. Duncan	July salary inst.	5	66 66
26	E. D. Cockins	July salary inst.	6	66 66
26	Edith R. Hubler	July salary inst.	7	40 00
26	W. C. McCracken	July salary inst.	8	150 00
26	Wm. Standley	July salary inst.	9	65 00
26	Wm. Case	July salary inst.	10	55 00
26	Benj. L. Bay	July salary, inst.	11	55 00
26	Geo. R. Rose	July salary inst.	12	75 00
26	C. H. Woodruff	July salary inst.	13	70 00
26	J. P. Covan	July salary inst.	14	83 33
26	A. F. Hall	July salary inst.	15	73 33
26	John Ricketts	July salary inst.	16	45 00
26	T. E. Osburn	July salary inst.	17	45 00
26	James Kelley	July salary inst.	18	30 00
26	C. M. Hicks	July salary inst.	19	45 00
26	Earl Conway	July salary inst.	20	25 00
26	G. A. Goodspeed	July salary inst.	21	40 00
26	John Brown	July salary inst.	22	25 00
26	John Brown	July salary inst.	23	15 00
26	Wm. R. Thomas	July salary inst.	24	40 00
26	Wm. Whitestine	July salary inst.	25	40 00
26	Harry Chantler	July salary inst.	26	40 00
26	Wash Townsell	July salary inst.	27	20 00
26	G. C. Denny	July salary inst.	28	40 00
26	M. N. Cook	July salary inst.	29	40 00
26	H. M. Templin	July salary inst.	30	40 00
26	F. E. Hamilton	July salary inst.	31	50 00
26	Laurel L. Hill	July salary inst.	32	33 33
26	F. J. Tyler	July salary inst.	33	40 00
26	W. C. Mills	July salary inst.	34	50 00
26	O. E. Jennings	July salary, inst.	35	50 00
26	E. E. Harrold	July salary inst.	36	93 33
26	V. H. Davis	July salary inst.	37	83 33
26	C. E. Sherman	July salary inst.	38	160 00
26	F. H. Eno	July salary inst.	39	150 00
Aug. 30	O. E. Jennings	August salary inst.	40	50 00
July 26	W. L. Davies	July salary inst.	41	60 00
26	H. Osborn	July salary inst.	42	225 00
26	F. L. Landacre	July salary inst.	43	100 00
26	J. H. Schaffner	July salary inst.	44	100 00
26	Jas. S. Hine	July salary inst.	45	50 00
26	E. L. Mosely	Services as asst.	46	20 00
26	F. E. Sanborn	July salary inst.	47	200 00
26	W. A. Knight	July salary inst.	48	120 00
26	W. H. Renck	July salary inst.	49	100 00
26	C. P. Crowe	July salary inst.	50	100 00
July 1	Edith R. Hubler	Typewriting	51	1 75
1	Alexis Cope	Expenses to Washington.	52	75 50
1	Carl E. Steeb	Notary	53	3 75
1	A. R. Barrington	Music, baccalaureate	54	35 00
2	Catherine Andrews	Laboratory assistance	55	5 00
2	J. N. Bradford	Lantern slides	56	40 20
2	F. M. Cashner	Campus work	57	23 00
2	J. F. Clevenger	Campus work	58	1 50
2	F. L. Downs	Campus work	59	1 43

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
2	Freda Detmers	Writing labels	60	17 90
2	M. Dresbach	Supplies	61	3 68
2	Clarence Eckman	Campus work	62	20 81
2	L. W. Funk	Student labor	63	24 90
2	C. C. Fauver	Hauling water	64	2 70
2	Thomas E. French	Engrossing certificates	65	6 60
2	Fred Fleisher	Janitor service	66	18 75
2	W. D. Griffith	Campus work	67	5 25
2	Arthur Geren	Supplies	68	8 90
2	J. W. Gwynne	Student labor	69	3 90
2	C. D. Hyatt	Campus work	70	3 37
2	D. L. Hurst	Campus work	71	8 68
2	W. A. Kellerman	Binding and stamps	72	103 33
2	W. H. Kempton	Student labor	73	2 40
2	L. R. Lee	Campus work	74	7 18
2	The Lantern	Advertisement	75	58 34
2	Frank C. Long	Books	76	10 92
2	Harry Lynn	Student labor	77	40 10
2	L. H. Meiche	Campus work	78	14 25
2	R. H. Minns	Campus work	79	3 93
2	Wm. T. Magruder	Money advanced	80	8 00
Aug. 30	F. J. Tyler	August salary inst.	81	50 00
July	Wm. McPherson	Money advanced	82	8 65
2	Clara L. Mark	Student labor	83	5 12
2	Ada L. Meyers	Student labor	84	12 25
2	L. S. McGarey	Student labor	85	10 65
2	Edward Orton, Jr.	Money advanced	86	3 00
2	J. K. Pritner	Janitor work	87	40 00
2	L. H. Strom	Making tracing	88	1 40
2	Mason Snow	Night watching	89	9 00
2	W. H. Siebert	Stamps	90	4 68
2	Jos. A. Stiver	Guide	91	21 38
2	B. F. Thomas	Cash advanced	92	6 00
2	T. L. Wheeler	Campus work	93	11 40
2	Burr Watters	Student labor	94	17 38
2	James Whetsel	Labor	95	82
2	Alice Wilson	Student labor	96	13 25
2	H. W. Brown	Anatomy horses	97	35 00
2	Gustav Bruder	Cash advance	98	4 00
2	Bowden Towel Supply Co.	Towel service	99	25 70
2	Electros, etc.	Bucher Eng. & Mfg. Co..	100	8 59
2	Blackwood, Green & Co.	Hardware	101	21 88
2	Columbus Gas Co.	Coke	102	30 73
2	Columbus Dry Goods Co.	Cheese cloth	103	1 50
2	Columbus Bank Note Co.	Certificates	104	28 80
2	Columbus Steam Pump Works	Valve seat	105	1 35
2	Columbus Tent & Awning Co.	Awnings	106	35 00
2	Citizens' Ice & Coal Co.	Ice	107	5 74
2	Columbus Supply Co. ..	Supplies	108	69 20
2	Columbus Brass Co.	Brass pipe	109	80
2	C. O. Paper Co.	Paper	110	23 18
2	Chas. M. Cott, Prop.	Printing	111	35 75
2	Columbus M. & M. Supply Co.	Supplies	112	184 53
2	Geo. D. Cross Lumber Co.	Lumber	113	39 19
2	Champlin Printing Co.	Printing	114	1,229 90
2	Electric Supply Const. Co.	Electric supplies	115	18 14

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
2	E. Doddington & Co.	Lumber and tables	116	71 40
2	The Erner-Hopkins Co.	Electric supplies	117	63 49
2	Federal Glass Co.	Glass sand	118	1 45
2	Franklin Park Floral Co.	Decoration	119	110 50
2	Green, Joyce & Co.	Towels	120	50 00
2	Hall Collins Hdw. Co. ....	.....	121	53
2	Fred J. Heer	Electros	122	7 20
2	Hann & Adair	Letter heads	123	4 06
2	R. R. Johnston	Com. luncheon	124	306 70
2	S. T. Knight	Tunnel, sewer, etc.	125	285 26
2	Krauss, Butler & Ben ham Co.	Decorating	126	25 50
2	Kinnear & Co.	Rock	127	4 00
2	Kelton & Converse	Lumber	128	15 92
2	Oscar S. Lear	Repairs	129	6 05
2	Murray City Coal Co.	Coal	130	1,301 26
2	McMaster & Fletcher	Conduit	131	164 10
2	W. H. Miller Co.	Supplies	132	8 84
2	McClelland & Co.	Pens	133	1 20
2	McAllister, Mohler & Co.	Cots, etc.	134	38 75
2	J. S. Maclean	Case, etc.	135	40 00
2	Nitschke Bros.	Printing	136	74 95
2	T. J. O'Neil	Awning and canvas	137	50 00
2	Penna. Fuel Co.	Coal	138	12 60
2	Ben D. Potts	Supplies	139	8 30
2	James Penn	Feed and hauling	140	36 85
2	Payne-McDonald Hard- ware Co.	Hardware	141	12 46
2	Ruggles, Gale & Co.	Ledger, etc.	142	14 50
2	J. W. Smiley	Halter repairing	143	2 60
2	Andrew Spittal	Repairing machine	144	1 25
2	Alice Smith	Typewriting	145	14 55
2	Schoedinger, Fearn & Co.	Hardware	146	17 73
2	Spahr & Glenn	Printing	147	76 65
2	Standard Oil Co.	Oil	148	26 37
2	Taylor, Williams & Co.	Coal	149	110 01
2	Tracey-Wells & Co.	Supplies	150	17 30
2	Tallmadge Hdw. Co.	Hardware	151	44 07
2	Vogelgesang Furnace Co.	Grate	152	4 25
2	Z. L. White & Co.	Drilling and cheese cloth	153	3 48
2	J. M. & W. Westwater	Lamps	154	1 75
2	J. F. Williams Milling Co.	Feed	155	107 42
2	Yeiser Livery	Hacks	156	12 00
2	Zanerian Art College	Engrossing album	157	10 00
2	John A. Brashear Co., Ltd.	Making cell	158	6 00
2	Jas. G. Biddle	Rheostat	159	16 00
2	W. H. Anderson & Co.	Reports	160	3 75
2	Am. Microscopical Soc'ty	Transactions	161	2 00
2	R. R. Bowker	Publications	162	2 00
2	Hermann Boker & Co.	Wire	163	13 10
2	H. A. Blakeslee	Tickets	164	15 00
2	E. Braun	Brushes	165	4 50
2	Carbutt Dry Plate & Film Co.	Plates	166	36 45
2	Chicago Lab. Supply Scale Co.	Supplies	167	11 94

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
2	Columbus Refining Co.	Oil soap	168	29 12
2	M. W. Crowner	Clerical work	169	3 00
2	Creamery Package Mfg. Co.	Butter wrappers	170	4 75
2	Central Electric Co.	Supplies	171	84 64
2	The Denisonian	Advertising	172	3 00
2	Grace Eagleson	Clerical work	173	9 95
2	A. J. Grout	Subscription	174	7 50
2	Glucose Sugar Refining Co.	Oil and gluten meal	175	78 00
2	Hohmann & Maurer Mfg. Co.	Repairs	176	20 50
2	Kirby & Co.	Paper cutter	177	11 00
2	Lincoln Electric Co.	Supplies	178	17 00
2	Library Bureau	N. P. Rack	179	15 00
2	J. L. Mott Iron Works ..	Tobey heater	180	240 00
2	Thos. Meehan & Sons ..	Trees and shrubs	181	162 99
2	A. McMichael	Engrossing diplomas ..	182	28 60
2	W. G. Nagel Elec. Co. ..	Electric supplies	183	11 70
2	Pratt Institute	Set blocks	184	13 75
2	Regal Packing Co.	Packing	185	3 38
2	E. H. Sargent & Co.	Supplies	186	2 50
2	Smith Premier Type-writer Co.	Ribbons	187	3 50
2	Stumpf & Steurer	Adv. Bond sale	188	28 50
2	Strobridge Litho. Co. ..	Commissions	189	10 00
2	Strong, Carlisle & Hammond Co.	Controller, bal. due	190	50 00
2	Standard Underground Cable Co.	Magnet wire	191	9 50
2	Standard Disinfectant Co	Disinfectant	192	12 00
2	G. E. Stechert	Books	193	190 31
2	Clara M. Tangemann ..	Work in dept.	194	6 00
2	Josephine E. Tilden ..	Algac	195	10 00
2	W. W. Williams	Expenses	196	4 25
2	E. A. Weaver	Constitutions	197	3 18
2	Western Kieley Steam Spec. Co.	Governor	198	100 00
2	Geo Felck	Estimate No. 9	199	3,467 50
2	W. Stillman Dutton ..	Architect services on Est. No. 9	200	86 69
2	Columbus Gas Co.	June gas bill	201	15 53
2	Engelke & Bigelow ..	Freight and cartage ..	202	20 17
5	H. Osborn	Six dozen gross trays.	203	3 00
5	W. Morelan	89 hrs. carp. work, etc.	204	31 15
8	C. P. Linhart	Postage and sundries ..	205	4 10
8	J. McLain Smith	Expense at meetings (May 6 to July 1)	206	26 75
8	Cols. Citz. Tel. Co.	Service, qr. ending Sept. 30, 1902	207	98 10
8	H. C. White	Exp. summer sch. agr.	208	55 85
24	L. J. Briggs	5 lectures, Graduate School Agr.	209	50 00
	W. J. Spillman	1 lecture, Graduate School Agr.	210	10 00
11	C. T. Curtiss	2 lectures, Graduate School Agr.	211	70 40
11	H. J. Waters	3 lectures, Graduate School Agr.	212	75 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
11	B. M. Duggar	4 lectures, Graduate School Agr.	213	40 00
11	H. J. Webber	4 lectures, Graduate School Agr.	214	40 00
11	H. W. Conn	5 lectures and expenses Graduate School Agr. ..	215	100 10
11	H. H. Wing	5 lectures, Graduate School Agr.	216	85 80
11	R. M. Rownd, P. M.	1,000 envelopes	217	21 20
14	Harrison, Olds & Henderson	Legal services in Page will case	218	10,000 00
14	R. M. Rownd, P. M.	Deposit for bulletins	219	30 00
15	F. H. King	5 lectures, Graduate School Agr.	220	50 00
15	Milton Whitney	5 lectures, Graduate School Agr.	221	50 00
15	C. D. Smith	Lecture and ex. Graduate School Agr.	222	76 00
15	M. A. Scovell	Lecture and ex. Graduate School Agr.	223	50 00
15	W. M. Hays	Lecture and ex., Graduate School Agr.	224	85 00
17	Chas. T. Howe	Commencement exercises and lunch	225	48 00
17	W. M. Liggett	Honorarium, etc., Sum. School Agr.	226	74 80
18	W. M. Munson	Lectures and ex. Sum. School Agr.	227	86 00
18	T. L. Haelcher	Lectures and ex. Sum. School Agr.	228	70 20
22	C. C. Wilcox	Janitor work	229	46 24
23	E. B. Voorhees	Lectures and ex., Sum. School Agr.	230	77 50
23	W. J. Kennedy	Lectures and ex., Sum. School Agr.	231	70 00
23	H. P. Armsby	Lectures and ex., Sum. School Agr.	232	154 75
25	W. L. Carlyle	Lectures and ex., Sum. School Agr.	233	60 50
25	H. J. Wheeler	Lectures and ex., Sum. School Agr.	234	73 00
25	L. L. Van Slyke	Lectures and ex., Sum. School Agr.	235	84 76
25	W. O. Atwater	Lectures and ex., Sum. School Agr.	236	72 00
25	G. L. McKay	Lectures and ex., Sum. School Agr.	237	120 00
25	C. A. Zavitz	Lectures and ex., Sum. School Agr.	238	30 40
25	Eugene Davenport	Lectures and ex., Sum. School Agr.	239	81 30
25	R. L. Polk & Co.	Copy city directory	240	5 00
26	R. M. Round, P. M.	Deposit for postage	241	20 00
26	Edith Seymour	Playing piano, gymnasium	242	2 50
30	C. G. Hopkins	3 lectures and ex. Sum. School Agr.	243	56 17
31	Jos. K. Pritner	Janitor, Summer School Agr.	244	40 00
31	Maude D. Jeffrey	Librarian, Summer School Agr.	245	60 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
31	J. F. Duggan	Lectures and ex. Sum.		
		School Agr.	246	43 89
31	C. S. Plumb	Lectures and ex. Sum.		
		School Agr.	247	66 00
31	W. H. Jordan	Lectures and ex. Sum.		
		School Agr.	248	76 25
31	J. W. Decker	Lectures, Summer School		
		Agr.	249	100 00
31	E. W. Allen	Lectures and ex. Summer		
		Agr.	250	54 50
31	W. D. Gibbs	Lectures and exp. Sum.		
		School Agr.	251	168 60
31	A. C. True	Honorarium as Dean, Sum		
		School Agr.	252	500 00
31	Great Southern Hotel ..	Board Lecturers, Sum.		
		School Agr.	253	230 33
Aug. 2	Harry Drumm	Services, helper to plumber		
		Aug.	254	20 00
July 31	Jos. N. Bradford	Architect fees, chemical		
		additn.	255	300 00
Aug. 5	Thos. Boude	Labor as fireman	256	40 25
1	Alexis Cope	Salary, August 1902	257	187 50
5	Fred Brewer	Cleaning bolts	258	38 50
5	Harry Covan	Labor	259	20 25
5	Alexis Cope	Expenses	260	5 25
5	W. Stillman Dutton	Architect fees	261	247 89
5	W. L. Davies	Labor	262	10 00
5	Jessie B. Karns	Stenographer	263	16 00
5	Harry Lynn	Wiring	264	50 00
5	Adah L. Meyers	Student labor	265	20 25
5	Clara G. Mark	Student labor	266	19 87
5	Wilbert Morelan	Carpenter work	267	57 40
5	Marion Peck	Labor	268	45 50
5	Money advanced	C. E. Sherman	269	63 91
5	W. O. Thompson	Expenses	270	5 25
5	Am. Sewer Pipe Co.	Pipe cement	271	21 10
5	Batterson Decorative			
	House	Papering	272	49 85
5	Coe & Spencer Lumber			
	Co.	Drawing boards	273	14 00
5	The H. Cole Co.	Instruments, etc.	274	365 51
5	Central Ohio Oil Co.	Oil	275	8 82
5	Champlin Printing Co.	Printing	276	20 25
5	Columbus Supply Co.	Supplies	277	91 48
5	Freight cartage	Engelke & Bigelow	278	42 19
5	The Erner-Hopkins Co.	Wire	279	2 00
5	Elect. Supply & Const. Co	Supplies	280	82 98
5	Fred J. Heer	Reprints	281	13 00
5	Charles W. Herb	White boxes	282	8 80
5	Hall Collins Hdw. Co.	Rope	283	5 44
5	Kauffman-Latimer Co.	Chemicals, etc.	284	47 76
5	Lawrence Press Co.	Letter heads, etc.	285	8 50
5	Livingston Seed Co.	Seeds	286	88 98
5	W. H. Miller Co.	Valves	287	12 50
5	Murray City Coal Co.	Coal	288	213 66
5	McClelland & Co.	Supplies	289	3 95
5	McAlister, Mohler & Co.	Furniture	290	28 17
5	Nitschke Bros.	Paper	291	6 00
5	The Ohio Pump & Brass			
	Co.	Copper	292	14 38

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
5	James Penn	Hauling	293	11 95
5	Charles J. Palmer	Iron and labor	294	1 69
5	The Ruggles-Gale Co.	Orders on treasurer	295	20 00
5	Spahr & Glenn	Letter heads and envelopes	296	6 00
5	Schoedinger, Fearn & Co.	Hardware	297	9 00
5	Tallmadge Hdw. Co.	Hardware	298	30 85
5	Albaugh Nursery & Orchard Co.	Trees	299	6 50
Aug. 5	Am. Entomological Co..	Boxes and labels	300	55 00
5	M. Crawford Company..	Plants	301	14 00
5	Elmer & Amend	Glass tubes	302	3 85
5	W. A. Graham Drug Store Co.	Supplies	303	1 75
5	Genl. Apparatus Chem. Co.	Supplies	304	25 84
5	The Goubert Mfg. Co.	Feed water heater	305	590 00
5	Henry T. Goebel	Furniture	306	9 50
5	H. W. Johns-Manville Co.	Supplies	307	11 30
5	The Kny Scheerer Co.	Supplies	308	9 72
5	H. Molyneux	Repairs	309	10 00
5	The Mt. Vernon Bridge Co.	Beams	310	64 68
5	A. I. Root Co.	Hives	311	44 55
5	Sandusky Plumbing Boiler Co.	Supplies	312	1 70
5	Sherwood Mfg. Co.	Cleaner	313	35 00
5	Stillwell-Bierce & Smith-Vaile Co.	Dup. pump	314	150 00
5	Standard Underground Cable Co.	Cable	315	291 31
5	G. E. Stechert	Book	316	2 05
5	Vallee Bros. Elect. Co..	Receipt	317	5 00
5	B. H. Wiegel & Son	Jars	318	1 15
5	Weston Elect. Inst. Co..	Volt and ammeters	319	128 45
5	Westinghouse, E. & M. Co.	Transformer	320	300 00
5	Paul Wenzel	Books	321	52 50
5	U. S. Telephone Co.	Toll services	322	97
5	Jos. A. Stiver	Guide service	323	24 00
Aug. 7	John T. Mack	Expenses as trustee	324	17 20
11	Edith R. Hubler	August salary	325	40 00
11	George Feick	Estimate No. 10, Law Bldg.	326	2 919 35
	George Feick	Est. No. 1, finishing base.	327	878 75
11	H. C. Lord	Money advanced	328	1 60
13	Paul Jones	Expenses as trustee	329	4 05
13	T. J. Godfrey	Expenses, meetings June and August	330	33 20
13	J. F. Coe	Campus work	331	8 40
13	F. M. Cashner	Campus work	332	15 12
13	J. F. Clevenger	Campus work	333	1 65
13	Clarence Eckman	Campus work	334	14 81
13	Fred Fleischer	Campus work	335	4 87
13	Alexander Freyre	Campus work	336	1 27
13	D. L. Hurst	Campus work	337	18 68
13	E. R. Minns	Campus work	338	4 00
13	R. H. Minns	Campus work	339	2 75
13	L. H. Meiche	Campus work	340	7 50
13	Herbert Osborn	Campus work	341	9 75

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
13	T. L. Wheeler	Campus work	342	1 35
13	R. M. Round, P. M.	Postage	343	15 00
14	L. L. Wheeler	Student labor	344	28 87
15	Metta Seymour	Typewriting	345	2 00
16	John T. Mack	Expenses, meetings August 12th and 13th	346	10 45
22	Charles C. Smith	Index tags	347	3 00
14	Carl E. Steeb	August salary	348	83 33
25	P. M. Ellis	Names V. M. L. surveys..	349	5 00
25	V. H. Davis	August salary	350	83 33
Aug. 30	W. O. Thompson	August salary, inst.	351	416 67
30	K. H. Duncan	August salary, inst.	352	66 66
30	E. D. Cockins	August salary, inst.	353	66 66
30	Wm. C. McCracken	August salary, inst.	354	150 00
30	W. A. Standley	August salary, inst.	355	65 00
30	Wm. Case	August salary, inst.	356	55 00
30	Benj. LeBay	August salary, inst.	357	55 00
30	Geo. R. Rose	August salary, inst.	358	75 00
30	Earl Kimmel	August salary, inst.	359	25 00
30	C. H. Woodruff	August salary, inst.	360	70 00
30	J. P. Covan	August salary, inst.	361	83 33
30	A. F. Hall	August salary, inst.	362	73 33
30	John Ricketts	August salary, inst.	363	45 00
30	Thos. E. Osborn	August salary, inst.	364	45 00
30	James Kelley	August salary, inst.	365	30 00
30	Charles Hicks	August salary, inst.	366	45 00
30	Earl Conway	August salary, inst.	367	25 00
30	G. A. Goodspeed	August salary, inst.	368	40 00
30	John Brown	August salary, inst.	369	25 00
30	John Brown	August salary, inst.	370	15 00
30	Wm. R. Thomas	August salary, inst.	371	40 00
30	Wm. Whitestone	August salary, inst.	372	40 00
30	Harry Chantler	August salary, inst.	373	40 00
30	Wash Townsell	August salary, inst.	374	20 00
30	G. C. Denny	August salary, inst.	375	40 00
30	M. N. Cook	August salary, inst.	376	40 00
30	H. M. Templin	August salary, inst.	377	40 00
30	F. E. Hamilton	August salary, inst.	378	50 00
30	Laurel L. Hill	August salary, inst.	379	33 33
30	W. C. Mills	August salary, inst.	380	40 00
30	E. E. Harrold	August salary, inst.	381	93 33
26	S. Sisson	Money advanced	382	6 75
28	Peter Baker	Ink and fixtures	383	2 50
28	W. U. Telegraph Co.	Telegrams	384	4 11
29	John Ricketts	Extra watchman service ..	385	21 00
30	R. M. Martin	July and August salary ..	386	40 00
Sept. 3	Columbus Railway Co.	Tickets	387	5 00
3	Ag. Stud. Publ. Co.	Advertising	388	15 00
3	H. B. Brooks	Student labor	389	3 12
3	J. M. Battenfield	Student labor	390	2 32
3	F. E. Beutler	Student labor	391	6 75
3	M. O. Bugby	Expenses	392	29 57
3	Thos. Boude	Labor	393	45 50
3	Fred Brewer	Cleaning boilers	394	43 75
3	W. J. Carruthers	Estimate No. 1, observatory	395	1,211 25
3	W. L. Clevenger	Student labor	396	1 50
3	Harry Covan	Student labor	397	39 00
3	F. C. Caldwell	Money advanced	398	14 54
3	F. M. Cashner	Campus work	399	23 62
3	J. F. Clevenger	Campus work	400	2 40

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
3	J. F. Coe	Campus work	401	28 05
3	W. Stillman Dutton ...	Architect fees	402	164 47
3	Clarence Eckman	Campus work	403	31 82
3	Thos. E. French	Drawings, etc.	404	19 00
3	F. A. Fish	Locating ground	405	10 00
3	C. C. Fauver	Campus work	406	1 65
3	W. D. Griffith	Campus work	407	5 92
3	A. G. Geren	Supplies	408	9 36
3	C. C. Hatfield	Campus work	409	3 12
3	G. B. Hoover	Campus work	410	1 62
3	D. L. Hurst	Campus work	411	24 62
3	W. F. Hunter	Money advanced	412	15 00
3	A. J. Harrington	Student labor	413	35 05
3	Jessie B. Karns	Stenographer	414	2 25
3	W. H. Kempton	Student labor	415	15 82
3	Harry Lynn	Student labor	416	52 00
3	Thomas K. Lewis	Photos.	417	5 00
3	W. Morelan	Carpenter work	418	64 40
3	Wm. T. Magruder	Supplies	419	11 00
3	E. R. Minns	Student labor	420	2 12
3	Clara G. Mark	Labor in dept.	421	8 50
3	Ada L. Meyers	Labor in dept.	422	7 62
3	E. A. Hitchcock	Supplies	423	6 80
3	N. Osborn	Campus work	424	8 75
3	Marion Peck	Labor	425	45 50
3	J. H. Randall	Carpenter work	426	5 60
3	Frank Ruhlén	Railroad fare	427	2 50
3	W. Sample	Labor	428	22 50
3	J. A. Stiver	Guide services	429	25 06
3	C. E. Sherman	Money advanced	430	6 15
3	J. W. Schneider	Carpenter work	431	2 80
3	W. Sample	Labor	432	19 50
3	L. H. Strom	Student labor	433	20 40
3	J. R. Thomas	Campus work	434	30 40
5	Carl Wilcox	Student labor	435	24 30
3	Burr Watters	Student labor	436	6 15
3	H. G. Weinland	Student labor	437	3 13
3	A. R. Wylie	Student labor	438	5 31
3	D. S. White	Money advanced	439	16 90
5	Am. Sewer Pipe Co. ...	Cement	440	10 00
5	The Ascher-Fox Co. ...	Supplies	441	11 26
5	H. W. Brown	Anatomy-horses	442	35 00
5	Buckeye Brass Fdry. ...	Casting	443	18 63
5	Borger Bros. & Co. ...	Repairs	444	7 68
5	H. Braun Sons & Co. ...	Supplies	445	8 81
5	Bowden-Towel Supply Co.	Towel service	446	7 70
5	Blackwood Green Co. ...	Repairs and hardware ...	447	351 48
5	Citizens' Ice & Coal Co. ...	Ice	448	7 00
5	Columbus Brass Co. ...	Plumbing supplies	449	123 70
5	C. O. Paper Co.	Paper, etc.	450	20 80
5	Columbus Mill & Mine Supply Co.	Supplies	451	43 16
5	Cross Lumber Company ...	Lumber	452	45 11
5	Champlin Printing Co. ...	Printing	453	79 75
5	Columbus Supply Co. ...	Supplies	454	125 33
5	Cols. Mdse. Co.	Supplies	455	10 37
5	Capital City Machine Works	Supplies	456	114 87
5	The H. Cole Company. ...	Blue prints	457	3 72

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
5	W. J. Davidson	Team and man	458	4 00
5	Engelke & Bigelow	Freight and cartage	459	47 94
5	The Electric Supply & Const. Co.	Supplies	460	202 20
5	Erner & Hopkins Co. ..	Supplies	461	250 61
5	Jeff. Ferrell	Resetting steps	462	70 00
5	The Griswold-Sohl Co. ..	Iron	463	24 17
5	The Huffman-Conklin Co.	Iron sewer	464	107 50
5	J. C. Howard	Painting	465	305 50
5	P. Hayden Saddlery Hardware Co.	Castings	466	33 04
5	Hall-Collins Hardware Co.	Hardware, etc.	467	50 73
5	J. J. Gheen	Plastering	468	90 75
5	Jeffrey Mfg. Co.	Cloth paper binding	469	6 05
5	Kauffman-Lattimer Co. .	Chemicals	470	14 41
5	Kimball & Mathews	Blue print paper	471	1 40
5	Kilbourne & Jacobs Mfg. Co.	Repairing wheel	472	3 00
5	Kelton & Converse	Lumber	473	11 47
5	W. H. Miller Co.	Supplies	474	361 89
5	McClelland & Co.	Stencil	475	1 10
5	Nitschke Bros.	Mat board	476	1 80
5	Ohio Furniture Co.	Stools	477	11 75
5	T. J. O'Neil	16 2-3 yds. canvas	478	4 17
5	James Penn	Hauling	479	5 00
5	Tingley Brothers	Feed	480	279 27
5	Taylor, Williams & Co. .	Coal	481	41 23
5	Tallmadge Hdw. Co. ..	Hardware	482	32 44
5	J. M. & W. Westwater..	Gas fixtures	483	5 90
5	Mrs. M. J. Worcester ..	Board and lodging	484	2 60
5	J. G. Wallace	Exhibition of horse	485	5 00
5	Am. Type Founders Co. .	Cabinet cases	486	27 75
5	The Armour Fertilizer Works	20-100 bags, M. B. tkge.	487	27 00
5	Burrows Bros. Co.	Book	488	3 62
5	M. S. Brooks & Sons ..	Supplies	489	2 50
5	D. H. Burrell & Co.	Laboratory supplies	490	20 60
5	Creamery Package Mfg. Co.	Repairs	491	10 00
5	The Cutler Co.	Voltmeter	492	42 34
5	Chicago Lab. Supply & Scale Co.	Supplies	493	85 65
5	Chapman Valve Mfg. Co. .	Valves	494	87 57
5	Central Electric Co.	Wire, knobs and gong	495	110 07
5	Elmer & Amend	Supplies	496	287 49
5	Edison Dec. & Min Lamp Co.	Lamps	497	14 68
5	J. A. Fav & Eagan Co. .	Sawing machine	498	124 45
5	The B. F. Goodrich Co. .	Tubes, corks, etc.	499	144 21
5	Glucose Sugar Refin. Co. .	Gluten meal	500	56 00
5	Chas. F. Mason, bursar.	Telegrams	501	2 75
5	Jarecki Mfg. Co.	Radiators	502	148 80
5	Jones & Laughlin, Ltd.	Steel	503	4 34
5	Lehr Agricultural Co. .	Lawn trimmer	504	3 50
5	J. F. Mack & Bro.	Paper, etc.	505	5 15
5	H. Molyneux	Sail boat and sailor	506	13 00
5	National Ammonia Co. .	Ammonia	507	14 56
5	W. G. Nagel Elect. Co. .	Supplies	508	25 13

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
5	Nat. Sci. Establishment	Lantern slides	509	52 00
5	Piqua Handle Mfg. Co. .	Crank handles	510	2 85
5	E. W. Pegg	Cows	511	340 00
5	Portland Company	Regulator	512	260 00
5	John A. Roebling's Sons Co.	Wire	513	9 92
5	E. R. Squibb & Sons ...	Alcohol and ether	514	23 28
5	E. H. Sargent & Co. .	Supplies	515	85 65
5	Standard Chain Company	Iron	516	10 94
5	Worcester Mach. Screw Co.	Supplies	517	1 50
5	Wheeler Condenser & Eng. Co.	Tubes	518	11 00
5	Columbus Water Works.	Tapping water main	519	20 00
4	D. M. Massie	Expenses as trustee	520	33 40
5	George Feick	Pmt., estimate No. 11, Law Bldg.	521	5,581 25
5	George Feick	Finishing basement Law Bldg.	522	997 50
8	R. M. Rownd, P. M. .	2,000 No. 13 envelopes	523	42 80
9	J. McLain Smith	Expenses as trustee	524	26 15
10	J. V. Denney	Sept. salary, 1902	525	225 00
11	Fred Macey Co.	Desk and chair	526	24 60
27	W. O. Thompson	September salary	527	416 67
27	Alexis Cope	September salary	528	187 50
15	Carl Steeb	September salary	529	83 33
27	K. H. Duncan	September salary	530	66 66
27	E. D. Cockins	Sept. salary, inst.	531	66 66
27	Helen R. Powell	Sept. salary, inst.	532	40 00
27	Edith R. Hubler	Sept. salary, inst.	533	40 00
27	Wm. C. McCracken ...	Sept. salary, inst.	534	150 00
27	W. A. Standley	Sept. salary, inst.	535	65 00
27	William Case	Sept. salary, inst.	536	55 00
27	Benj. LeBay	Sept. salary, inst.	537	55 00
27	Thos. Boude	Sept. salary, inst.	538	50 00
27	Fred Brewer	Sept. salary, inst.	539	50 00
27	Marion Peck	Sept. salary, inst.	540	45 00
27	Geo. R. Rose	Sept. salary, inst.	541	75 00
27	Earl Kimmel	Sept. salary, inst.	542	25 00
27	C. H. Woodruff	Sept. salary, inst.	543	70 00
27	J. P. Covan	Sept. salary, inst.	544	83 33
27	A. F. Hall	Sept. salary, inst.	545	73 33
27	John Ricketts	Sept. salary, inst.	546	45 00
27	Thos. E. Osburn	Sept. salary, inst.	547	45 00
27	M. S. Harvey	Sept. salary, inst.	548	25 00
27	R. M. Martin	Sept. salary, inst.	549	20 00
27	Chas. Hicks	Sept. salary, inst.	550	45 00
27	Earl Conway	Sept. salary, inst.	551	25 00
27	G. A. Goodspeed	Sept. salary, inst.	552	40 00
27	John Brown	Sept. salary, inst.	553	25 00
27	John Brown	Sept. salary, inst.	554	15 00
27	Wm. R. Thomas	Sept. salary, inst.	555	40 00
27	F. E. Fleischer	1-2 salary, Sept. 1902	556	20 00
27	Wm. Whitestein	Sept. salary, inst.	557	40 00
27	H. Chantler	Sept. salary, inst.	558	40 00
27	W. Townsell	Sept. salary, inst.	559	20 00
27	G. C. Denny	Sept. salary, inst.	560	40 00
27	M. N. Cook	Sept. salary, inst.	561	40 00
27	J. K. Pritner	Sept. salary, inst.	562	40 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
27	H. M. Templin	Sept. salary, inst.	563	40 00
27	Thos. F. Hunt	Sept. salary, inst.	564	250 00
27	John W. Decker	Sept. salary, inst.	565	170 00
27	Chas. S. Plumb	Sept. salary, inst.	566	200 00
27	Frank Ruhlen	Sept. salary, inst.	567	90 00
27	M. F. Miller	Sept. salary, inst.	568	100 00
27	Laurel L. Hill	Sept. salary, inst.	569	33 33
27	H. A. Weber	Sept. salary, inst.	570	225 00
27	Alfred Vivian	Sept. salary, inst.	571	150 00
27	Rudolph Hirsch	Sept. salary, inst.	572	40 00
27	Geo. W. Knight	Sept. salary, inst.	573	250 00
27	Theo. C. Smith	Sept. salary, inst.	574	130 00
27	Geo. W. Rightmire	Sept. salary, inst.	575	90 00
27	A. M. Bleile	Sept. salary, inst.	576	225 00
27	Chas. B. Morrey	Sept. salary, inst.	577	140 00
27	M. Dresbach	Sept. salary, inst.	578	80 00
27	R. J. Seymour	Sept. salary, inst.	579	25 00
27	Wm. C. Mills	Sept. salary, inst.	580	40 00
27	Jos. N. Bradford	Sept. salary, inst.	581	210 00
27	Thos. E. French	Sept. salary, inst.	582	150 00
27	Thos. K. Lewis	Sept. salary, inst.	583	100 00
27	Silas Martin	Sept. salary, inst.	584	100 00
27	J. G. Vosskuehler	Sept. salary, inst.	585	120 00
27	Lucian Shaw	Sept. salary, inst.	586	30 00
27	H. C. Lord	Sept. salary, inst.	587	225 00
27	W. B. Skimming	Sept. salary, inst.	588	30 00
27	W. A. Kellerman	Sept. salary, inst.	589	225 00
27	J. H. Schaffner	Sept. salary, inst.	590	130 00
27	Jas. G. Sanders	Sept. salary, inst.	591	25 00
27	Harriett G. Burr	Sept. salary, inst.	592	25 00
Nov. 21	O. E. Jennings	Nov. salary, inst.	593	50 00.
27	O. E. Jennings	Sept. salary, inst.	594	50 00
27	S. A. Norton	Sept. salary, inst.	595	120 00
27	Wm. McPherson	Sept. salary, inst.	596	225 00
27	W. E. Henderson	Sept. salary, inst.	597	140 00
27	C. W. Foulk	Sept. salary, inst.	598	120 00
27	M. W. Mumma		599	70 00
27	Katherine E. Andrews	Sept. salary, inst.	600	30 00
27	E. N. Webb	Sept. salary, inst.	601	30 00
27	F. J. Muirie	Sept. salary, inst.	602	30 00
27	C. E. Sherman	Sept. salary, inst.	603	180 00
27	A. H. Heller	Sept. salary, inst.	604	180 00
27	Frank H. Eno	Sept. salary, inst.	605	150 00
27	W. L. Davies	Sept. salary, inst.	606	60 00
27	Edw. Orton, Jr.	Sept. salary, inst.	607	200 00
27	A. V. Bleininger	Sept. salary, inst.	608	100 00
27	M. A. Stoner	Sept. salary, inst.	609	180 00
27	C. P. Souther	Sept. salary, inst.	610	120 00
27	F. C. Clark	Sept. salary, inst.	611	200 00
27	J. E. Hagerty	Sept. salary, inst.	612	120 00
27	D. R. Major	Sept. salary, inst.	613	160 00
27	F. C. Caldwell	Sept. salary, inst.	614	190 00
27	F. A. Fish	Sept. salary, inst.	615	110 00
27	H. B. Brooks	Sept. salary, inst.	616	30 00
27	A. C. Barrows	Sept. salary, inst.	617	225 00
27	J. R. Taylor	Sept. salary, inst.	618	150 00
27	W. H. Siebert	Sept. salary, inst.	619	180 00
27	Edw. H. McNeal	Sept. salary, inst.	620	100 00
27	Chas. S. Prosser	Sept. salary, inst.	621	190 00
27	Jno. A. Brownveker	Sept. salary, inst.	622	160 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
27	E. A. Eggers	Sept. salary, inst.	623	225 00
27	C. W. Mesloh	Sept. salary, inst.	624	160 00
27	B. A. Eisenlohr	Sept. salary, inst.	625	80 00
27	Sarah Barrows	Sept. salary, inst.	626	40 00
27	J. R. Smith	Sept. salary, inst.	627	225 00
27	A. W. Hodgman	Sept. salary, inst.	628	160 00
27	W. S. Elden	Sept. salary, inst.	629	130 00
27	W. R. Lazenby	Sept. salary, inst.	630	225 00
27	V. H. Davis	Sept. salary, inst.	631	83 33
27	F. E. Sanborn	Sept. salary, inst.	632	200 00
27	W. A. Knight	Sept. salary, inst.	633	120 00
27	W. H. Renck	Sept. salary, inst.	634	100 00
27	C. P. Crowe	Sept. salary, inst.	635	100 00
27	W. Morelan	Sept. salary, inst.	636	30 00
27	S. C. Derby	Sept. salary, inst.	637	225 00
27	Wm. F. Hunter	Sept. salary, inst.	638	250 00
	J. H. Collins	Sept. salary, inst.	639	20 00
27	J. A. Shauck	Sept. salary, inst.	640	100 00
27	E. B. Kinhead	Sept. salary, inst.	641	130 00
27	W. H. Page	Sept. salary, inst.	642	200 00
27	E. O. Randall	Sept. salary, inst.	643	80 00
27	Olive Jones	Sept. salary, inst.	644	145 00
27	F. A. Bohn	Sept. salary, inst.	645	60 00
27	Harriett Townsbend ..	Sept. salary, inst.	646	60 00
27	Gertrude Kellicott	Sept. salary, inst.	647	60 00
27	Maudie Jeffrey	Sept. salary, inst.	648	60 00
27	C. B. Guittard	Sept. salary, inst.	649	60 00
27	Elizabeth Smythe	Sept. salary, inst.	650	40 00
27	R. D. Bohannon	Sept. salary, inst.	651	225 00
27	G. W. McCoard	Sept. salary, inst.	652	160 00
27	James E. Boyd	Sept. salary, inst.	653	150 00
27	C. L. Arnold	Sept. salary, inst.	654	130 00
27	H. W. Kuhn	Sept. salary, inst.	655	110 00
27	S. E. Rasor	Sept. salary, inst.	656	100 00
27	Wm. T. Magruder	Sept. salary, inst.	657	225 00
27	E. A. Hitchcock	Sept. salary, inst.	658	175 00
	Horace Judd	Sept. salary, inst.	659	120 00
	Lloyd Yost	Sept. salary, inst.	660	30 00
	E. G. Bailey	Sept. salary, inst.	661	30 00
	N. W. Lord	Sept. salary, inst.	662	200 00
	E. E. Somermeier	Sept. salary, inst.	663	110 00
	Gustav Bruder	Sept. salary, inst.	664	20 00
	Frank A. Ray	Sept. salary, inst.	665	200 00
	Geo. B. Kauffman	Sept. salary, inst.	666	200 00
	C. A. Dye	Sept. salary, inst.	667	110 00
	W. H. Scott	Sept. salary, inst.	668	225 00
	T. H. Haines	Sept. salary, inst.	669	130 00
	A. E. Davies	Sept. salary, inst.	670	90 00
	C. P. Linhart	Sept. salary, inst.	671	160 00
	C. M. Berryman	Sept. salary, inst.	672	85 00
	D. C. Huddleson	Sept. salary, inst.	673	80 00
	B. F. Thomas	Sept. salary, inst.	674	225 00
	A. D. Cole	Sept. salary, inst.	675	200 00
	F. E. Kester	Sept. salary, inst.	676	100 00
	L. B. Tuckerman	Sept. salary, inst.	677	70 00
	W. L. Graves	Sept. salary, inst.	678	130 00
	G. H. McKnight	Sept. salary, inst.	679	130 00
	T. H. Dickenson	Sept. salary, inst.	680	110 00
	Gilbert Pennock	Sept. salary, inst.	681	30 00
Nov. 21.	Gilbert Pennock	November salary, inst.	682	30 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Clara Ewalt	Sept. salary, inst.	683	30 00
	B. L. Bowen	Sept. salary, inst.	684	225 00
	Chas. A. Bruce	Sept. salary, inst.	685	150 00
	J. D. Batchelder	Sept. salary, inst.	686	120 00
	D. S. White	Sept. salary, inst.	687	190 00
	Paul Fischer	Sept. salary, inst.	688	180 00
	S. Sisson	Sept. salary, inst.	689	160 00
	O. V. Brumley	Sept. salary, inst.	690	85 00
	H. Osborn	Sept. salary, inst.	691	225 00
	Jas. S. Hine	Sept. salary, inst.	692	120 00
	F. L. Landacre	Sept. salary, inst.	693	120 00
	Otto H. Swezy	Sept. salary, inst.	694	30 00
	W. W. Boyd	Sept. salary, inst.	695	200 00
26	R. M. Rownd, P. M. ..	150 2-cent postage stamps ..	696	3 00
	Central Union Telephone Co.	Telephone rental and tolls.	697	28 42
	Mrs. Mary Ways	Assistance	698	8 75
	Mrs. Arthur Garnes ...	Assistance	699	1 25
	Cora Elliott	Sept. salary	700	25 00
Sept. 26	J. N. Bradford	Architect fees, vet. bldg. ..	701	1,250 00
	J. N. Bradford	Architect fees, chem. bldg. ..	702	250 00
27	F. E. Beutler	Janitor, elect. engn.	703	12 50
	W. A. Landacre	Sept. salary	704	75 00
	James McOwen, Jr.	Sept. salary	705	33 33
	Max Morse	Sept. salary	706	15 00
	James Kelley	Sept. salary	707	30 00
	Ray M. Royer	Sept. salary	708	62 75
	E. F. Coddington	Sept. salary	709	90 00
	R. Peirce	Janitor	710	18 00
29	Martha Hartford	Sept. salary	711	30 00
	John T. Mack	Expenses	712	14 45
	R. M. Round, P. M.	Postage deposit	713	25 00
	Pearl Coutellier	Sept. salary	714	10 00
30	James W. Bannon	Legal expenses (Cuppett & Webb case)	715	1,100 00
Oct. 1	Lily Weeks	Salary	716	6 00
	Frank H. Miesse	Salary	717	30 00
	Alexis Cope	October salary	718	187 50
2	W. U. Telegraph Co.	Telegrams	719	2 87
2	H. Osborn	Jones Illus. of Ohio Birds. ..	720	50 00
3	E. Ogden	Term. & lab. fees	721	17 00
	Francis Adrix	Salary to Oct. 1st, 1902 ...	722	12 00
	Florence Price	Sept. salary	723	40 00
9	Ellsworth Ogden	Sept. salary	724	20 00
14	Lillie Weeks	Janitor	725	12 00
	H. Braun, Sons & Co. ..	Chemical supplies	726	72 57
	Cols. Citz. Phone Co. ..	'Phone rental to 12-31-02 ..	727	102 50
	F. C. Caldwell	Petty items	728	4 92
	F. C. Caldwell	Petty items	729	9 60
	Cols. Citz. Phone Co. ..	'Phone extension rent.	730	5 40
	W. Boos	Refund of S. room card ..	731	3 79
	J. L. Roseman	Refund of S. room card ..	732	3 48
16	H. G. Beatty	Refund of S. room card ..	733	1 78
17	Cols. Water Works	Water rents to 10-1-02.	734	1,186 37
	A. C. Wile	Store room card refund ...	735	4 00
	Ag. Student Publ. Co. ..	Stationery	736	4 00
	Gertrude Bellows	Clerical work	737	10 40
	F. E. Beutler	Student labor	738	7 13
	J. W. Brewer	Campus work	739	5 00
	E. J. Billings	Student labor	740	3 88

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	C. M. Curtis	Hauling water	741	94
	W. E. Cook	Labor	742	6 00
	W. I. Carruthers	Estimate No. 2, observa-		
		tory changes	743	950 00
	J. V. Cranston	Labor	744	12 00
	W. I. Carruthers	Building, etc.	745	168 42
	F. M. Cashner	Labor	746	5 00
	V. A. Dennis	Janitor work	747	3 25
	Effe Duncan	Clerical work	748	11 70
	W. Stillman Dutton ..	Architect fees	749	149 62
	Grace Eagleson	Clerical work	750	12 40
	Clarence Eckman	Campus work	751	7 25
	William Essig	Campus work	752	39 20
	Chas. H. Flory	Student labor	753	6 25
	L. W. Funk	Labor	754	51 60
	George Feick	Estimate No. 12, Reg. Law		
		Bldg.	755	4,940 00
	George Feick	Estimate No. 3, basement.	756	1,045 00
	W. D. Griffith	Campus work	757	29 75
	U. S. Green	Campus work	758	1 12
	A. L. Harrington	Labor	759	40 08
	C. B. Hoover	Student labor	760	7 50
	S. Hummon	Campus work	761	7 31
	D. L. Hurst	Campus work	762	14 75
	James S. Hine	Money advanced	763	10 36
	Olive Jones	Money advanced	764	1 25
	W. A. Kellerman	Money advanced	765	14 02
	Jessie Karns	Stenographer	766	16 00
	W. H. Kempton	Student labor	767	34 11
	Helen B. Lambdin	Stenographer	768	9 23
	L. R. Lee	Campus work	769	1 87
	Max W. Morse	Labor	770	20 00
	Wm. C. McCracken	Expenses	771	10 00
	W. Morelan	Carptr. work	772	49 35
	L. H. Melche	Campus work	773	1 25
	Wm. T. Magruder	Money advanced	774	8 50
	F. R. Main	Campus work	775	1 12
	T. J. Godfrey	Expenses as trustee ..	776	78 20
	Harry Lynn	Labor	777	27 20
	L. S. McGarry	Labor	778	11 25
	O. F. Metz	Janitor work	779	8 25
	Clara G. Mark	Student labor	780	10 25
	Adah L. Meyers	Labor	781	9 88
	R. M. Martin	Grading	782	6 75
	Edw. Orton, Jr.	Money advanced	783	20 75
	Roy Pratt	Labor	784	13 50
	R. C. Purdy	Labor	785	83 33
	C. C. Poindexter	Student labor	786	5 10
	C. B. Ross	Student labor	787	14 62
	James Robinson	Campus work	788	1 75
	J. H. Randall	Carpenter work	789	70 00
	J. A. Stiver	Guide service	790	29 55
	J. A. Schneider	Carpenter work	791	70 00
	Clarence Stinchcomb ..	Campus work	792	1 21
	W. B. Lafferty	Refund on S. R. card ..	793	4 04
	Ralph Shephard	Campus work	794	1 21
	O. B. Smith	Campus work	795	1 75
	W. H. Siebert	Money advanced	796	9 96
	W. Sample	Labor	797	38 40
	W. O. Thompson	Expenses as president ..	798	11 90

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	J. R. Thomas	Campus work	799	14 43
	B. F. Thomas	Expenses	800	58 60
	A. P. Wylie	Labor	801	24 06
	C. C. Wilcox	Labor	802	40 30
	Webb Sta. & Ptg. Co. ..	Supplies	803	29 65
21	Am. Journal of Physi- ology	Publication	804	5 00
	Am. Grange Bulletin ..	Advertisement	805	8 40
	Am. Hard Rubber Co. ..	Label holder	806	4 25
	Am. Ceramic Society ...	Leger's writings	807	14 00
	Boston Book Co.	Books	808	40 37
	H. H. Ballard	Klips	809	3 12
	Buffalo Scale Co.	Scale	810	24 16
	Burrows Bros. Co.	Books	811	257 28
	E. Bartholomew	Publication	812	6 00
	R. R. Bowker	Trade list	813	7 00
	A. H. Barber Mfg. Co. ..	Oil and packing	814	5 00
	C. H. Woodruff	Ladders, etc.	815	55 00
	Browne & Sharp Mfg. Co.	Scales	816	6 00
	Bausch-Lomb Opt. Co. ..	Instruments	817	22 50
	J. Bishop & Co.	Remaking platinum	818	23 31
	Bourne & Knowles Mfg. Co.	Gaskets	819	6 47
	Crucible Steel Co.	Tools	820	51 94
	Central Elect. Co.	Elect. air heaters	821	24 25
	Chautauqua Institution.	Advertising	822	8 75
	The Caxton Co.	Litho plate	823	37 84
	Bryson & Son	Repairs	824	24 00
	Chapman Valve Mfg. Co.	Valves	825	88 37
	Crosby Steam Gage & Valve Co.	Gage tester	826	45 00
	Univ. of Chicago Press.	Reprints	827	25 00
	Clucas & Boddington Co.	Bulbs, etc.	828	29 00
	Cutter Elect. & Mfg. Co. ..	Voltmeter	829	46 80
	The Commercial Bulletin	Advertising	830	6 40
	The Commercial Tribune	Advertising	831	9 40
	Engr. News Publ. Co. ...	Advertising	832	13 20
	Electric Appliance Co. ..	Bushings	833	80
	F. W. Emerson Mfg. Co. ..	Felt	834	1 25
	Enquirer Co.	Advertising	835	9 40
	Engineering & Mining Journal	Advertising	836	8 29
	Eimer & Amend	Supplies	837	135 61
	Geo. L. English & Co. ..	Models	838	27 50
	Farmers' Handy Wagon Co.	Hound plates	839	1 00
	Gowing & Co.	Calorimeter	840	23 00
	Greenfield Mach. Co. ...	Grinder	841	237 50
	Gen'l App. Chem. Co. ...	Microtome	842	64 50
	Henry J. Green	Thermometers	843	72 50
	Emil Greiner	Scientific instruments	844	24 08
	W. R. Harrison & Co. ...	Repairs	845	6 30
	Herman Haerlin	Professional services	846	115 55
	India Alkali Works	Savagran	847	18 79
	International Text Book Co.	Subscription	848	2 00
	H. W. Johns-Manville Co.	Contacts	849	1 02
	Geo. T. Johnson Co.	Toilet paper	850	49 50

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
18	Machado & Roller	Meters	851	95 63
21	Carl E. Steeb	Notary work	852	3 25
	F. W. Prentiss, Pres. ..	Exchange, Imp. Hayez ..	853	3 09
	Jones & Laughlins	Steel	854	4 88
	Ernst Leitz	Microscope	855	42 90
	The Laning Co.	Adv.	856	24 00
	Leader Printing Co.	Proposals	857	7 55
	Library Bureau	Furniture and supplies ...	858	136 00
	J. Marsching & Co.	Oxides	859	25 46
	A. C. McClurg & Co.	Books	860	1 25
	W. H. Miller, Editor ...	Advertisement	861	6 00
	National Ammonia Co. ...	Ammonia	862	23 64
	The Ohio Farmer	Advertisement	863	88 20
	The Post Glover Elect. Co.	Canopies	864	11 70
	Plain Dealer Publ. Co. ...	Advertising	865	8 65
	Pratt Institute	Set bottles	866	15 75
	Post Publ. Co.	Advertising	867	10 90
	John A. Roeblings Sons Co.	Wire	868	4 83
	Re-New Lamp Co.	Lamps	869	26 38
	T. A. Randall & Co. ...	Advertising	870	36 00
	Justice Roe & Sons	Tapes	871	52 32
	Sherwood Mfg. Co.	Supplies	872	34 50
	G. E. Stechert	Books	873	216 42
	John G. Schaal	Books	874	83 80
	L. S. Starrett Co.	Speed indicator	875	2 39
	Smithsonian Institute ..	Publication	876	9 90
	Smith-Premier Type- writer Co.	Desk and supplies	877	32 45
	The Signal Co.	Advertising	878	5 00
	The Toledo Blade	Advertising	879	18 80
	Edw. Thompson Co. ...	Encyclopedia	880	6 00
	The Van Dorn-Elliott Elec. Co.	Supplies	881	18 00
	Westinghouse, Church, Kerr Co.	Bushings	882	2 70
	Wilmarth & Morman Co. ...	Drill grinder	883	45 00
	H. W. Wilson	U. S. catalog	884	5 00
	Westinghouse Elec. Co. ...	Motors	885	870 00
	J. H. Williams & Co. ...	Wrenches	886	1 26
	The Gale-Towne Mfg Co. ...	Latch keys	887	12 81
	Am. Machine Co.	Oliver No. 3	888	70 00
	Acme Paving Co.	Laying floors, Hayes hall..	889	248 00
	Am. Sewer Pipe Co.	Cement and pipe	890	23 54
	Am. Dist. Telegraph Co. ...	Rent of boxes	891	289 54
	Ascher & Fox Co.	Plumbers' supplies	892	58 16
	Bakers' Art Gallery	Enlarging photos	893	5 00
	Bowden Towel Supply Co.	Towels	894	30 66
	The David C. Beggs Co. ...	Shades	895	4 10
	Blackwood-Green Co. ...	Hardware and repairs	896	164 11
	Berlin Printing Co.	Printing	897	51 75
	Batterson Decorative House	Decorating	898	82 12
	H. Braun, Sons & Co. ...	Drugs and sundries	899	37 65
	Columbus Dispatch	Advertising	900	9 25
21	Cols. Mdse. Co.	Mdse.	901	3 55
	G. W. Clarke & Co.	Pickets	902	5 75
	O. T. Corson	Law adv.	903	16 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Cols. Forge & Iron Co. .	Anvils	904	23 69
	Central Ohio Paper Co. .	Paper	905	3 05
	Cols. M. & M. Supply Co.	Supplies	906	72 26
	Cap. City Mach. Wks. .	Supplies	907	51 58
	Columbus Supply Co. .	Supplies	908	1,078 38
	Charles M. Cott	Printing	909	7 50
	Champlin Ptg. Co.	Printing	910	543 15
	Geo. D. Cross Lumber Co.	Lumber	911	145 99
	Columbus Press	Advertising	912	23 00
	E. L. Charles	Hauling	913	9 46
	E. Doddington & Co. .	Lumber	914	107 70
	W. J. Davidson	Hay	915	3 60
	Elec. S. & Const. Co. .	Electrical supplies	916	41 83
	Engelke & Bigelow ..	Freight and cartage	917	67 61
	The Erner-Hopkins Co. .	Electrical supplies	918	35 29
	Frankenberg Bros.	Mailing tubes	919	72
	Fitzpatrick & Hoepfner.	Part payment, observatory contract	920	275 00
	J. J. Gheen	Plastering	921	9 40
	Howald & Conklin	Desk	922	16 00
	Fred J. Heer	Printing	923	617 90
	Hann & Adair	Printing	924	42 35
	J. C. Howard	Painting	925	332 70
	Hanna Paint Mfg. Co. .	Paint	926	25 37
	Kilbourne-Jones Co. .	Scales	927	3 50
	Wm. T. Kull	Mantles and globes	928	2 20
	Jeffrey Mfg. Co.	Mica	929	4 00
	Kauffman, Lattimer & Co.	Drugs and supplies	930	26 28
	Wm. A. Jones	Hay	931	23 07
	Kelton & Converse	Lumber	932	26 84
	Lutheran Book Concern	Binding	933	9 20
	Oscar S. Lear	Paper and ink	934	3 60
	Mitchell & Flinn	Painting	935	20 35
	W. H. Miller & Co.	Valve and ells	936	3 80
	Monypeny-Hammond Co.	Matches	937	2 75
	McDonald's Livery	Carriages	938	7 00
	McClelland & Co.	Supplies	939	4 70
	McAllister, Mohler & Co.	Furniture	940	60 50
	Nitschke Bros.	Printing	941	34 52
	D. M. Osborne & Co. .	Harvester	942	75 00
	Ohio Messenger	Advertising	944	15 00
	Ohio Furniture Co.	Loan chairs	943	4 25
	Orr, Brown & Price	Supplies	945	9 30
	Penna. Fuel Co.	Coal	946	36 36
	Ben D. Potts	Supplies	947	6 43
	Ohio State Journal Co..	Advertising	948	8 40
	R. L. Polk & Co.	Directory	949	5 00
	James Penn	Feed and hauling	950	19 87
21	Ruggles-Gale Co.	Blank book, etc.	951	25 50
	Sparks-Seward Co.	Fire clay	952	4 50
	A. H. Smythe	Blotting paper	953	5 00
	Sackett Mine Supply Co.	Wire	954	1 35
	Harry E. Smith	Printing labels	955	1 00
	Standard Oil Co.	Oil and gasoline	956	10 40
	Seraphim B. Book Co. .	Binding	957	169 10
	A. C. Sager	Chalk trough	958	70 00
	Schroth & Potter	Shades	959	18 80

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Spahr & Glenn	Printing	960	59 00
	Shoedinger, Fearn & Co.	Hardware	961	61 53
	Tracy Wells & Co.	Pails	962	4 50
	Tallmadge Hdw. Co.	Hardware	963	19 64
	Wyckoff, Seamaas & Benedict	Repairs on typewriter	964	8 27
	Geo. F. Wheeler	Groceries	965	12 62
	Frank Walcutt	Oats	966	39 44
	J. M. Westwater	Mantles	967	75
	Wagner Typewriter Co.	Ribbon	968	1 00
	Vogelgesang Furnace Co.	Furnace repairs	969	8 08
	H. B. Yeiser	Wagon rent	970	6 00
	P. F. Yoerger	Lettering signs	971	12 00
	Evaline Harrington ...	Student labor	972	29 82
	Frank Stultz	Student labor	973	27 00
	W. O. Thompson	Expenses	974	10 49
20	C. C. Huntington	September salary	975	25 00
25	W. O. Thompson	October salary, inst.	976	416 67
	Carl E. Steeb	October salary, inst.	977	83 33
	K. H. Duncan	October salary, inst.	978	66 66
	Edith D. Cockins	October salary, inst.	979	66 66
	E. R. Hubler	October salary, inst.	980	40 00
	Gertrude Bellows	October salary, inst.	981	35 00
	Wm. C. McCracken	October salary, inst.	982	150 00
	W. A. Standley	October salary, inst.	983	65 00
	Wm. Case	October salary, inst.	984	55 00
	Benj. LeBay	October salary, inst.	985	55 00
	Thos. Boude	October salary, inst.	986	50 00
	Fred Brewer	October salary, inst.	987	50 00
	Marion Peck	October salary, inst.	988	45 00
	George Rose	October salary, inst.	989	75 00
	Earl Kimmel	October salary, inst.	990	25 00
	C. H. Woodruff	October salary, inst.	991	70 00
	J. P. Covan	October salary, inst.	992	83 33
	A. F. Hall	October salary inst.	993	73 33
	John Ricketts	October salary, inst.	994	45 00
	Thos. E. Osburn	October salary, inst.	995	45 00
	James Kelley	October salary, inst.	996	30 00
	M. S. Harvey	October salary, inst.	997	25 00
	H. A. Hamilton	October salary, inst.	998	12 50
	F. E. Beutler	October salary, inst.	999	12 50
	Raymond Peirce	October salary, inst.	1000	18 00
25	R. M. Martin	October salary, inst.	1001	20 00
	Chas. M. Hicks	October salary, inst.	1002	45 00
	Earl Conway	October salary, inst.	1003	25 00
	G. A. Goodspeed	October salary, inst.	1004	40 00
	Chester McClintock	October salary, inst.	1005	20 00
	John Brown	October salary, inst.	1006	15 00
	John Brown	October salary, inst.	1007	25 00
	Wm. R. Thomas	October salary, inst.	1008	40 00
	F. E. Fleischer	October salary, inst.	1009	40 00
	Wm. Whitestone	October salary, inst.	1010	40 00
	H. Chantler	October salary, inst.	1011	40 00
	Wash Townsell	October salary, inst.	1012	20 00
	G. C. Denny	October salary, inst.	1013	40 00
	M. N. Cook	October salary, inst.	1014	40 00
	J. K. Pritner	October salary, inst.	1015	40 00
	H. M. Templin	October salary, inst.	1016	40 00
	Frances Andrix	October salary, inst.	1017	30 00
	Thos. F. Hunt	October salary, inst.	1018	250 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Jno. W. Decker	October salary, inst.	1019	170 00
	Chas. S. Plumb	October salary, inst.	1020	200 00
	Frank Ruhlen	October salary, inst.	1021	90 00
	M. F. Miller	October salary, inst.	1022	100 00
	Laurel Hill	October salary, inst.	1023	33 33
	H. A. Weber	October salary, inst.	1024	225 00
	Alfred Vivian	October salary, inst.	1025	150 00
	Rudolph Hirsch	October salary, inst.	1026	40 00
	Geo. W. Knight	October salary, inst.	1027	250 00
	Theo. C. Smith	October salary, inst.	1028	130 00
	Geo. W. Rightmire	October salary, inst.	1029	140 00
	A. M. Belle	October salary, inst.	1030	225 00
	C. B. Morrey	October salary, inst.	1031	140 00
	M. Dresbach	October salary, inst.	1032	80 00
	R. J. Seymour	October salary, inst.	1033	25 00
	Wm. C. Mills	October salary, inst.	1034	40 00
	Pearl Coutellier	October salary, inst.	1035	10 00
	J. N. Bradford	October salary, inst.	1036	210 00
	Thos. E. French	October salary, inst.	1037	150 00
	Thos. K. Lewis	October salary, inst.	1038	100 00
	Silas Martin	October salary, inst.	1039	100 00
	J. H. Vosskuehler	October salary, inst.	1040	120 00
	Lucian Shaw	October salary, inst.	1041	30 00
	H. C. Lord	October salary, inst.	1042	225 00
	W. B. Skimming	October salary, inst.	1043	30 00
	W. A. Kellerman	October salary, inst.	1044	225 00
	J. H. Schaffner	October salary, inst.	1045	130 00
	James G. Sanders	October salary, inst.	1046	25 00
	Harriett G. Burr	October salary, inst.	1047	25 00
	O. E. Jennines	October salary, inst.	1048	50 00
	James McOwen	October salary, inst.	1049	33 33
	S. A. Norton	October salary, inst.	1050	120 00
25	Wm. McPherson	October salary, inst.	1051	225 00
	W. E. Henderson	October salary, inst.	1052	140 00
	C. W. Foulk	October salary, inst.	1053	120 00
	M. W. Mumma	October salary, inst.	1054	70 00
	Catharine E. Andrews ..	October salary, inst.	1055	30 00
	E. W. Webb	October salary, inst.	1056	30 00
	C. E. Sherman	October salary, inst.	1057	180 00
	A. H. Heller	October salary, inst.	1058	180 00
	F. H. Eno	October salary, inst.	1059	150 00
	W. L. Davies	October salary, inst.	1060	60 00
	Ray M. Royer	October salary, inst.	1061	62 50
	W. A. Landacre	October salary, inst.	1062	75 00
	Edw. Orton, Jr.	October salary, inst.	1063	200 00
	A. V. Bleininger	October salary, inst.	1064	100 00
	M. A. Stoner	October salary, inst.	1065	180 00
	E. Ogden	October salary, inst.	1066	20 00
	C. P. Souther	October salary, inst.	1067	120 00
	Cora Elliott	October salary, inst.	1068	25 00
	F. C. Clark	October salary, inst.	1069	200 00
	J. E. Haggerty	October salary, inst.	1070	120 00
	F. H. Miesse	October salary, inst.	1071	30 00
	D. R. Major	October salary, inst.	1072	160 00
	F. C. Caldwell	October salary, inst.	1073	190 00
	F. A. Fish	October salary, inst.	1074	110 00
	H. B. Brooks	October salary, inst.	1075	30 00
	A. C. Barrows	October salary, inst.	1076	225 00
	J. R. Taylor	October salary, inst.	1077	150 00
	W. H. Siebert	October salary, inst.	1078	180 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	E. H. McNeal	October salary, inst.	1079	100 00
	Chas. S. Prosser	October salary, inst.	1080	190 00
	J. A. Bownocker	October salary, inst.	1081	160 00
	E. A. Eggers	October salary, inst.	1082	225 00
	Chas. W. Mesloh	October salary, inst.	1083	160 00
	B. A. Eisenlohr	October salary, inst.	1084	80 00
	Sarah Barrows	October salary, inst.	1085	40 00
	J. R. Smith	October salary, inst.	1086	225 00
	A. W. Hodgman	October salary, inst.	1087	160 00
	W. S. Elden	October salary, inst.	1088	130 00
	W. R. Lazenby	October salary, inst.	1089	225 00
	V. H. Davis	October salary, inst.	1090	83 33
	F. E. Sanborn	October salary, inst.	1091	200 00
	W. A. Knight	October salary, inst.	1092	120 00
	W. H. Renck	October salary, inst.	1093	100 00
	C. P. Crowe	October salary, inst.	1094	100 00
	W. Morelan	October salary, inst.	1095	30 00
	S. C. Derby	October salary, inst.	1096	225 00
	W. F. Hunter	October salary, inst.	1097	250 00
	J. H. Collins	October salary, inst.	1098	20 00
	J. A. Shauck	October salary, inst.	1099	100 00
	E. B. Kinkead	October salary, inst.	1100	130 00
25	W. H. Page	October salary, inst.	1101	200 00
	E. O. Randall	October salary, inst.	1102	80 00
	E. D. Howard	October salary, inst.	1103	25 00
	Olive Jones	October salary, inst.	1104	145 00
	Harriet Townshend	October salary, inst.	1105	60 00
	Gertrude Kellicott	October salary, inst.	1106	60 00
	Maude Jeffrey	October salary, inst.	1107	60 00
	C. B. Guittard	October salary, inst.	1108	60 00
	Elizabeth Smythe	October salary, inst.	1109	40 00
	Martha Hartford	October salary, inst.	1110	30 00
	R. D. Bohannon	October salary, inst.	1111	225 00
	G. W. McCoard	October salary, inst.	1112	160 00
	J. E. Boyd	October salary, inst.	1113	150 00
	C. L. Arnold	October salary, inst.	1114	130 00
22	Wm. Whitestone	Squirrel feed	1115	4 00
25	E. F. Coddington	October salary, inst.	1116	90 00
	H. W. Kuhn	October salary, inst.	1117	110 00
	S. E. Raser	October salary, inst.	1118	100 00
	Wm. F. Magruder	October salary, inst.	1119	225 00
	E. A. Hitchcock	October salary, inst.	1120	175 00
	Horace Judd	October salary, inst.	1121	120 00
	Lloyd Yost	October salary, inst.	1122	30 00
	E. G. Bailey	October salary, inst.	1123	30 00
	N. W. Lord	October salary, inst.	1124	200 00
	E. E. Sommermeier	October salary, inst.	1125	110 00
	Gustav Bruder	October salary, inst.	1126	20 00
	G. O. Spittler	October salary, inst.	1127	60 00
	Frank A. Ray	October salary, inst.	1128	200 00
	T. B. Simon	October salary, inst.	1129	30 00
	Geo. B. Kauffman	October salary, inst.	1130	200 00
	C. A. Dye	October salary, inst.	1131	110 00
	W. H. Scott	October salary, inst.	1132	225 00
	T. H. Haines	October salary, inst.	1133	130 00
	A. E. Davies	October salary, inst.	1134	90 00
	C. P. Linhart	October salary, inst.	1135	160 00
	C. M. Berryman	October salary, inst.	1136	85 00
	D. C. Huddleson	October salary, inst.	1137	80 00
	Alma H. Wacker	Oct. and Sept. salary, inst.	1138	15 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	B. F. Thomas	October salary, inst.	1139	225 00
	A. D. Cole	October salary, inst.	1140	200 00
	F. E. Hester	October salary, inst.	1141	100 00
	L. B. Tuckerman	October salary, inst.	1142	70 00
	J. V. Denney	October salary, inst.	1143	225 00
	W. L. Graves	October salary, inst.	1144	130 00
	G. H. McKnight	October salary, inst.	1145	130 00
	Gilbert Pennock	October salary, inst.	1146	30 00
	Clara Ewalt	October salary, inst.	1147	30 00
	F. J. Muirie	October salary, inst.	1148	30 00
	T. H. Dickenson	October salary, inst.	1149	110 00
	B. L. Bowen	October salary, inst.	1150	225 00
25	C. A. Bruce	October salary, inst.	1151	150 00
	J. W. Batchelder	October salary, inst.	1152	120 00
	D. S. White	October salary, inst.	1153	190 00
	Paul Fisher	October salary, inst.	1154	180 00
	S. Sisson	October salary, inst.	1155	160 00
	O. V. Brumley	October salary, inst.	1156	85 00
	H. W. Brown	October salary, inst.	1157	30 00
	H. Osborn	October salary, inst.	1158	225 00
	J. S. Hine	October salary, inst.	1159	120 00
	F. L. Landacre	October salary, inst.	1160	120 00
	Otto N. Swezy	October salary, inst.	1161	30 00
	Max Morse	October salary, inst.	1162	15 00
	W. W. Boyd	October salary, inst.	1163	200 00
	Florence Price	October salary, inst.	1164	40 00
	Lily Weeks	October salary, inst.	1165	18 00
	Hermine de Nagy	October salary, inst.	1166	60 00
	J. C. Cone	October salary, inst.	1167	15 00
	Martha Hartford	October salary, inst.	1168	10 00
	C. C. Huntington	October salary, inst.	1169	25 00
29	Norman Slee	October salary, inst.	1170	20 00
	Charles Lewis	October salary, inst.	1171	20 00
	Chester McClintock	Sept. salary	1172	10 00
	H. H. Hamilton	Sept. salary	1173	12 50
30	L. Veit & Co.	Repairing	1174	35 85
Nov. 4	R. M. Round, P. M.	Postage stamps	1175	10 00
11	Alexis Cope	Nov. salary, inst.	1176	187 50
7	Jas. Westwater & Co. ..	Estimate No. 1, Veterinary Bldg.	1177	3,990 00
	A. C. Barrows	Money advanced	1178	2 75
	E. Ogden	S. R. card	1179	5 00
	D. W. McGrath	Estimate No. 1, Chemical addition	1180	3,135 00
8	F. L. Allen	Campus work	1181	2 50
	O. C. Alleshouse	Campus work	1182	1 16
	C. P. Burkey	Student labor	1183	10 05
	Tracy Bartholomew	Student labor	1184	2 75
	O. V. Brumley	Plates and powders	1185	1 27
	J. E. Bard	Feed	1186	2 00
	J. S. Bailey	Guide service	1187	3 25
	E. J. Bleillings	Student labor	1188	11 87
	J. E. Bender	Anatomy horses	1189	40 00
	May Bennett	Services	1190	1 50
8	W. H. Carruthers	Carpenter work	1191	5 00
	H. W. Clark	Campus work	1192	1 18
	R. J. Carver	Campus work	1193	2 43
	H. Cranston	Labor	1194	3 30
	C. M. Curtis	Hauling water	1195	9 90
	F. C. Clark	Office supplies	1196	1 00
	Pearl Coutellier	Services	1197	5 58

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
Nov. 8	W. I. Carruthers	Est. No. 3, Observatory changes	1198	619 75
	H. L. Doud	Student labor	1199	7 60
	Harry S. Day	Labor	1200	2 48
	W. O. Dean	Labor	1201	5 51
	M. Dresbach	Supplies	1202	12 58
	Harry S. Day	Labor	1203	2 70
	J. E. Ensweiler	Labor	1204	8 25
	Wm. Essig	Carpenter work	1205	70 00
	L. W. Funk	Student labor	1206	31 40
	Paul Fischer	Supplies	1207	5 12
	W. D. Griffith	Labor	1208	13 05
	N. S. Green	Campus work	1209	2 96
	R. Glass	Campus work	1210	1 25
	D. L. Hurst	Campus work	1211	7 43
	S. Hammon	Campus work	1212	9 62
	E. E. Hyatt	Campus work	1213	3 62
	R. W. Harned	Campus	1214	1 68
	A. L. Harrington	Labor	1215	20 62
	O. F. Humphrey	Labor	1216	3 00
	Thomas F. Hunt	Expenses	1217	53 00
	J. M. Harsh	Labor	1218	3 07
	T. W. Halloway	Labor	1219	13 43
	H. N. Judson	Labor	1220	10 60
	Ed. Kinney	Labor	1221	1 25
	Geo. W. Knight	Expenses	1222	21 15
	F. R. Kunkle	Student labor	1223	39 00
	D. K. Hempstead	Labor	1224	14 65
	L. R. Lee	Campus work	1225	1 25
	F. C. Ladrach	Student labor	1226	1 25
	W. R. Iazenny	Expenses	1227	8 00
	Helen B. Lambdin	Stenographer	1228	24 00
	C. L. Minor	Student labor	1229	1 25
	F. R. Main	Labor	1230	4 37
	O. V. Mauer	Labor	1231	1 27
	O. F. Metz	Janitor work	1232	13 95
	D. P. Moreton	Labor	1233	25 73
	Clara G. Mark	Labor	1234	7 00
	J. P. Pratt	Labor	1235	11 90
	C. C. Poindexter	Labor	1236	4 62
	Roy Pratt	Labor	1237	40 75
	W. H. Redhead	Labor	1238	4 80
	James Robinson	Student labor	1239	1 12
	H. O. Rowe	Labor	1240	3 75
	W. L. Roller	Labor	1241	3 00
	C. B. Ross	Student labor	1242	5 44
	J. H. Randall	Carpenter work	1243	66 85
	J. L. Scott	Drawing plan	1244	4 05
	J. A. Stiver	Guide service	1245	16 05
	Mason Snow	Night watch	1246	22 50
	James L. Scott	Wiring	1247	3 83
	A. Straub	Labor	1248	3 28
	Thos. M. Sherman	Labor	1249	7 90
	Roy Stockley	Labor	1250	1 75
	P. Schupp	Labor	1251	11 00
	R. F. Smith	Campus work	1252	1 25
	R. E. Shepard	Labor	1253	1 06
	C. E. Stinchcomb	Labor	1254	4 50
	W. H. Siebert	Stamps	1255	29 45
	W. Sample	Labor	1256	47 65

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	J. A. Schneider	Carpenter work	1257	72 45
	R. Tomkinson	Campus work	1258	1 18
	J. M. Taggart	Campus work	1259	1 25
	W. O. Thompson	Expenses	1260	24 40
	L. F. Vaughan	Guide work	1261	9 24
	J. E. Weaver	Campus work	1262	1 25
	F. M. Webber	Correcting problems	1263	11 25
	S. P. Ward	Law building work	1264	1 44
	A. B. Welty	Labor	1265	1 27
	J. H. Wilson	Labor	1266	1 06
	Mildred Waters	Stenographer	1267	1 35
	D. S. White	Supplies	1268	3 71
	J. H. Wilson	Labor	1269	2 90
	A. L. Achauer	Oven hot plate	1270	3 50
	Kimball & Matthews	Plates	1271	140 05
	Columbus Supply Co.	Supplies	1272	284 23
	J. V. Crabston	October salary	1273	45 00
	Ascher Fox Co.	Brackets	1274	3 19
11	Acme Paving Co.	Cement	1275	6 50
11	C. H. Benson	Adv.	1276	5 00
	John W. Brown	Platinum	1277	95
	Bucher Eng. & Mfg. Co.	Etchings	1278	9 37
	H. Braun Sons & Co.	Chemical supplies, etc.	1279	99 08
	Blackwood, Green & Co.	Hardware	1280	7 22
	Colts. Photo. Supply Co.	Plates, etc.	1281	16 80
	Colts. Mdse. Co.	Labels and paste	1282	12 90
	Colts. Forge & Iron Co.	Forgings	1283	8 50
	Colts. Machine Co.	Pins	1284	1 89
	Colts. Macadam Co.	Crushed stone	1285	28 18
	Wm. Custer	Groceries	1286	6 83
	Colts. Buggy Co.	Repairing	1287	9 05
	Colts. Table Mfg. Co.	Tables	1288	30 00
	Capital City Mach. Wks.	Supplies, etc.	1289	76 68
	Geo. D. Cross Lumber Co.	Lumber	1290	36 96
	C. O. Paper Co.	Paper	1291	5 70
	Cherrington P. & Eng. Co.	Stamps, etc.	1292	4 25
	Columbus Brass Co.	Supplies	1293	17 08
	Champlin Ptg. Co.	Printing	1294	86 75
	The H. Cole Co.	Supplies	1295	13 03
	Dunn, Taft & Co.	Towels	1296	2 00
	Engelke & Bigelow	Freight carting	1297	66 38
	Electric Supply & Const. Co.	Supplies	1298	25 08
	Erner & Hopkins	Supplies	1299	26 87
	H. L. Fishback & Co.	Hardware	1300	7 80
11	A. G. Geren	Paper	1301	1 50
	Green, Joyce & Co.	Towels	1302	18 60
	Howald & Conklin	Desk and chair	1303	30 00
	Chas. B. Hood	Window cleaner	1304	3 00
	Hofman Supply Co.	Clock	1305	7 38
	J. C. Howard	Printing	1306	63 00
	N. C. Hager	Groceries	1307	16 33
	Hann & Adair	Printing	1308	4 80
	Wm. N. King & Edwin Sharp, Trustees	Rent of land	1309	250 00
	Krauss, Butler & Benham	Shades	1310	2 55
	Kilbourne & Jacobs Mfg. Co.	Cart and barrow	1311	11 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Kauffman-Lattimer Co.	Chemical supplies	1312	477 16
	Kelton & Converse	Lumber	1313	20 67
	W. L. Lillie & Co.	Frames	1314	3 25
	Lawrence Press Co.	Printing	1315	41 50
	Philip Long	Lpunches	1316	13 00
	Val Loewer	Stools	1317	11 70
	Murray City Coal Co. ..	Coal	1318	1,352 62
	M. O. Mitchell & Son ..	Cutting hole	1319	2 00
	McClelland & Co.	Supplies	1320	5 88
	W. H. Miller & Co.	Supplies	1321	3 43
	McAllister, Mohler & Co.	Furniture	1322	51 50
	Nitschke Bros.	Printing	1323	33 71
	Orr, Brown & Price	Chem. supplies	1324	186 53
	Chas. J. Palmer	Repairs	1325	19 58
	The Phagocyte	Advertising	1326	30 00
	James Penn	Feed	1327	20 32
	Ruggles-Gale & Co.	Supplies	1328	1 70
	Reeves Bros.	Locker rods, hasps, etc. ...	1329	33 00
	M. P. Street	Masonry	1330	396 63
	Sunday Creek Coal Co. ..	Coal	1331	9 06
	Andrew Spittal	Repairing	1332	1 50
	Schroth & Potter	Shades	1333	2 70
	Shilling Fdry Co.	Castings	1334	3 12
	Sheppard & Co.	Printing	1335	12 75
	Standard Oil Co.	Oil	1336	12 90
	J. Smoller	Polish	1337	5 00
	Schoedinger, Fearn & Co.	Hardware	1338	57 23
	Spahr & Glenn	Printing	1339	18 50
	Tracy, Wells & Co.	Supplies	1340	25 20
	Taylor, Williams & Co. ..	Coal	1341	33 29
	Tallmadge Hdwe. Co.	Hardware	1342	60 55
	Z. L. White & Co.	Supplies	1343	6 30
	W. S. Wiggins	Stamps	1344	45
	A. H. Andrews Co.	Chairs	1345	500 00
	Am. Aristotype Co.	Paper	1346	12 64
	Brimley Bros.	Insects	1347	6 75
	Baker & Adamson Co.	Chemicals	1348	1 40
	Baker & Co.	Plat foil	1349	81 95
	Jas. G. Biddle	Sci. instruments	1350	47 26
	Brown & Sharpe Mfg. Co.	Saw	1351	2 00
	H. H. Ballard	Klips	1352	5 00
	Bausch & Lomb Opt. Co.	Supplies	1353	36 95
	Burrows Bros. Co.	Books	1354	58 99
	The Caxton Co.	Board	1355	17 09
	Columbia Law Review ..	Advertising	1356	5 00
	Central Electric Co.	Lamps	1357	45 35
	Wm. B. Dana Co.	Com. & financial chronicle	1358	10 00
	Chicago Lab. Supply			
	Scale Co.	Supplies	1359	69 40
	Deering Harvester Co. ..	Extras	1360	18 20
	Eimer & Amend	Supplies	1361	343 90
	The B. F. Goodrich Co.	Mats	1362	12 90
	W. & L. E. Gurley	Instruments	1363	139 50
	Gen'l App. & Chem. Co.	Microscope, etc.	1364	375 90
	J. W. Hills	Lantern slides	1365	4 50
	Hohmann & Maurer Mfg Co.	Apparratus	1366	9 00
	W. C. Heller & Co.	Boxes	1367	12 95

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Wm. G. Johnston & Co.	Holders	1368	3 50
	Journal of Commerce & Com. Bul.	Subscription	1369	12 00
	The Kny Scheerer Co. .	Pins, etc.	1370	15 15
	H. Kohlbusch	Plat. weights	1371	31 10
	E. H. Kellogg & Co.	Cyl. oil	1372	46 80
	Keuffel & Esser Co.	Transit and tables	1373	300 80
	John A. & Frank Kelly.	Cow	1374	72 75
	Library Bureau	Cards	1375	2 00
	Ernst & Leitz	Haemacytometer	1376	20 00
	Montgomery, Ward & Co	Supplies	1377	19 92
	E. B. Meyrowitz	Masks	1378	57
	Philip Nell	Labels	1379	2 01
	Nicholson File Co.	Files	1380	3 45
	Nat. Sci. Establishment	Slides	1381	28 00
	New York Times	Subscription	1382	8 50
	Junius Olsen & Co.	Blanks	1383	3 00
	The S. Obermayer Co. .	Blocks	1384	7 50
	Rand, McNally & Co. .	Maps	1385	15 60
	Sprague Publ. Co.	Advertising	1386	7 50
	Standard Chain Co.	Iron	1387	3 11
	Strobridge Litho. Co. .	Commissions	1388	10 00
	Stanley Electric Co. .	Repairing	1389	7 95
	Standard Tool Co.	Taps	1390	70
	J. Roland Storey	Systems	1391	18 00
	Spencer Lens Co.	Microscopes, etc.	1392	382 00
	Truax, Greene & Co.	Pump	1393	15 00
	Arthur H. Thomas Co. .	Supplies	1394	287 79
	Univ. State of New York	Map	1395	5 00
	E. T. Watson	Chemicals and apparatus .	1396	16 93
	Weston Elec. Inst. Co. .	Voltmeter	1397	14 18
	Williams, Brown & Earle	Instruments	1398	79 00
	Whitall Tatum Co.	Flasks and tubing	1399	39 83
	Western Kieley Steam Spec. Co.	Valve trap,	1400	38 75
11	Webb Sta. & Ptg. Co. .	Supplies	1401	3 10
	West. E. & M. Co.	Supplies	1402	4 68
	Wards Nat. Sci. Estab..	Map	1403	12 00
	F. C. Caldwell	Petty items	1404	4 95
12	E. N. Webb	Bal. Sept. and Oct. salary	1405	60 00
13	Cols. Gas Co.	Gas	1406	172 00
	W. S. Dutton	Architect fees	1407	149 75
14	E. Hard	S. R. card	1408	2 35
	H. C. Lord	Money advanced	1409	4 00
15	J. B. Wishart	Store room card	1410	1 75
	W. W. Boyd	Expenses	1411	68 90
17	J. V. Denney	November salary	1412	225 00
	F. W. Prentiss, Treas. .	For exch. to R. Koenig ..	1413	124 80
	George Feick	Estimate No. 13, Law bldg.	1414	4,845 00
	George Feick	Extras, estimate No. 4 ...	1415	1,140 00
	R. M. Rownd, P. M.	Two-cent stamps	1416	4 00
18	C. H. Woodruff	Cash advanced	1417	45
	H. Osborn	Money advanced	1418	4 65
	W. N. Bates	Store room card	1419	1 65
	O. R. Shumard	Store room card	1420	2 00
20	Alexis Cope, Bursar	Store room cards, returned fees	1421	28 08
	S. C. Derby	Cash advanced	1422	5 50
21	F. W. Prentiss, Treas. .	Bonds and int. due 12-1-02, at U. S. Mort. & Trust Co.	1423	26,125 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	F. W. Prentiss, Treas.	Six mo. int. due 12-1-02, on 30,000 6's and 120,000 4 1-2's	1424	3,600 00
	F. W. Prentiss, Treas.	6 mo. int. on 80,000 4 1-2's	1425	1,800 00
	E. B. Voorhees, Secy.	Membership dues, A. A. A. C. & E. S.	1426	15 00
25	C. P. Linhart	November salary	1427	160 00
	W. O. Thompson	November salary	1428	416 67
	Carl E. Steeb	November salary	1429	83 33
	K. H. Duncan	November salary	1430	66 66
	Edith D. Cockins	November salary	1431	66 66
	Edith R. Hubler	November salary	1432	40 00
	Gertrude Bellows	November salary	1433	35 00
	Wm. C. McCracken	November salary	1434	150 00
	W. A. Stanley	November salary	1435	65 00
	Wm. Case	November salary	1436	55 00
	Benj. LeBay	November salary	1437	55 00
	Thos. Boude	November salary	1438	50 00
	Fred Brewer	November salary	1439	50 00
	Marion Peck	November salary	1440	50 00
	Geo. R. Rose	November salary	1441	75 00
	Earl Kimmell	November salary	1442	25 00
	Norman Slee	November salary	1443	20 00
	Chas. Lewis	November salary	1444	20 00
	J. V. Cranston	November salary	1445	45 00
	C. H. Woodruff	November salary	1446	70 00
	J. P. Covan	November salary	1447	83 33
	A. F. Hall	November salary	1448	73 33
	John Ricketts	November salary	1449	45 00
	Thos. E. Osburn	November salary	1450	45 00
	James Kelley	November salary, inst.	1451	30 00
	M. S. Harvey	November salary, inst.	1452	25 00
	H. H. Hamilton	November salary, inst.	1453	12 50
	F. E. Beutler	November salary, inst.	1454	12 50
	Raymond Pierce	November salary, inst.	1455	18 00
	R. M. Martin	November salary, inst.	1456	20 00
	Chas. M. Hicks	November salary, inst.	1457	45 00
	Earl Conway	November salary, inst.	1458	25 00
	G. A. Goodspeed	November salary, inst.	1459	40 00
	Chester McClintock	November salary, inst.	1460	20 00
	John Brown	November salary, inst.	1461	25 00
	John Brown	November salary, inst.	1462	15 00
	Wm. R. Thomas	November salary, inst.	1463	40 00
	F. E. Fleischer	November salary, inst.	1464	40 00
	Wm. Whitestine	November salary, inst.	1465	40 00
	Harry Chantler	November salary, inst.	1466	40 00
	Wash Townsell	November salary, inst.	1467	20 00
	G. C. Denny	November salary, inst.	1468	40 00
	M. N. Cook	November salary, inst.	1469	40 00
	J. K. Pritner	November salary, inst.	1470	40 00
	H. M. Templin	November salary, inst.	1471	40 00
	Frances Andrix	November salary, inst.	1472	30 00
	J. W. Brown	November salary, inst.	1473	20 00
	Thos. F. Hunt	November salary, inst.	1474	250 00
	John W. Decker	November salary, inst.	1475	170 00
	Chas. S. Plumb	November salary, inst.	1476	200 00
	Frank Ruhlen	November salary, inst.	1477	90 00
	M. F. Miller	November salary, inst.	1478	100 00
22	Laura L. Hill	November salary, inst.	1479	33 33
	Mildred Waters	Sept., Oct. and Nov. salary	1480	105 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	H. A. Weber	November salary, inst.	1481	225 00
	Alfred Vivian	November salary, inst.	1482	150 00
	Rudolph Hirschen	November salary, inst.	1483	40 00
	Geo. W. Knight	November salary, inst.	1484	250 00
	Theo. C. Smith	November salary, inst.	1485	130 00
	Geo. W. Rightmire	November salary, inst.	1486	115 00
	A. M. Bleile	November salary, inst.	1487	225 00
	C. B. Morrey	November salary, inst.	1488	140 00
	M. Dresbach	November salary, inst.	1489	80 00
	R. J. Seymour	November salary, inst.	1490	25 00
	W. C. Mills	November salary, inst.	1491	40 00
	Pearl Couttellier	November salary, inst.	1492	10 00
	J. N. Bradford	November salary, inst.	1493	210 00
	Thos. E. French	November salary, inst.	1494	150 00
	Thos. K. Lewis	November salary, inst.	1495	100 00
	Silas Martin	November salary, inst.	1496	100 00
	J. H. Vosskuehler	November salary, inst.	1497	120 00
	J. S. Tidball	November salary, inst.	1498	150 00
	Lucian Shaw	November salary, inst.	1499	30 00
	H. C. Lord	November salary, inst.	1500	225 00
	W. A. Kellerman	November salary, inst.	1501	225 00
	J. H. Schaffner	November salary, inst.	1502	130 00
	Jas. G. Sanders	November salary, inst.	1503	25 00
	Harriett G. Burr	November salary, inst.	1504	25 00
	James McOwen	November salary, inst.	1505	33 33
	S. A. Norton	November salary, inst.	1506	120 00
	Wm. McPherson	November salary, inst.	1507	225 00
	W. E. Henderson	November salary, inst.	1508	140 00
	C. W. Foulk	November salary, inst.	1509	120 00
	M. W. Mumma	November salary, inst.	1510	70 00
	Catherine E. Andrews ..	November salary, inst.	1511	30 00
	E. W. Webb	November salary, inst.	1512	60 00
	C. E. Sherman	November salary, inst.	1513	180 00
	A. H. Heller	November salary, inst.	1514	180 00
	F. H. Eno	November salary, inst.	1515	150 00
	W. L. Davies	November salary, inst.	1516	60 00
	Ray M. Royer	November salary, inst.	1517	62 50
	W. A. Landacre	November salary, inst.	1518	75 00
	Edw. Orton, Jr.	November salary, inst.	1519	200 00
	A. V. Bleininger	November salary, inst.	1520	100 00
	E. Ogden	November salary, inst.	1521	20 00
	M. A. Stoner	November salary, inst.	1522	180 00
	C. P. Souther	November salary, inst.	1523	120 00
	Cora Elliott	November salary, inst.	1524	25 00
	F. C. Clark	November salary, inst.	1525	200 00
	J. E. Hagerty	November salary, inst.	1526	120 00
	Frank H. Miesse	November salary, inst.	1527	30 00
	D. R. Major	November salary, inst.	1528	160 00
	F. C. Caldwell	November salary, inst.	1529	190 00
	F. A. Fish	November salary, inst.	1530	110 00
	H. B. Brooks	November salary, inst.	1531	30 00
	A. C. Barrows	November salary, inst.	1532	225 00
	J. R. Taylor	November salary, inst.	1533	150 00
	W. H. Siebert	November salary, inst.	1534	180 00
	E. H. McNeal	November salary, inst.	1535	100 00
	Chas. S. Prosser	November salary, inst.	1536	190 00
	J. W. Bownocker	November salary, inst.	1537	160 00
	E. A. Eggers	November salary, inst.	1538	225 00
	C. W. Mesloh	November salary, inst.	1539	160 00
	W. T. Stewart	Store room card	1540	1 77

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	B. A. Eisenlohr	November salary, inst.	1541	80 00
	Sarah Barrows	November salary, inst.	1542	40 00
	J. R. Smith	November salary, inst.	1543	225 00
	A. W. Hodgman	November salary, inst.	1544	160 00
	W. S. Elden	November salary, inst.	1545	130 00
	W. R. Lazenby	November salary, inst.	1546	225 00
	V. H. Davis	November salary, inst.	1547	83 33
	F. E. Sanborn	November salary, inst.	1548	200 00
	W. A. Knight	November salary, inst.	1549	120 00
	W. H. Renck	November salary, inst.	1550	100 00
	C. P. Crowe	November salary, inst.	1551	100 00
	W. Morelan	November salary, inst.	1552	30 00
	S. C. Derby	November salary, inst.	1553	225 00
	W. F. Hunter	November salary, inst.	1554	250 00
	J. H. Collins	November salary, inst.	1555	20 00
	J. A. Shauck	November salary, inst.	1556	100 00
	E. B. Kinkead	November salary, inst.	1557	130 00
	W. H. Page	November salary, inst.	1558	200 00
	E. O. Randall	November salary, inst.	1559	80 00
	E. D. Howard	November salary, inst.	1560	25 00
	Olive Jones	November salary, inst.	1561	145 00
	Harriet Townshend	November salary, inst.	1562	60 00
	Gertrude Kellicott	November salary, inst.	1563	60 00
	Maude Jeffrey	November salary, inst.	1564	60 00
	C. B. Guittard	November salary, inst.	1565	60 00
	Eliz. Smythe	November salary, inst.	1566	40 00
	Martha Hartford	November salary, inst.	1567	40 00
	J. C. Cone	November salary, inst.	1568	30 00
	R. D. Bohannon	November salary, inst.	1569	225 00
	G. W. McCoard	November salary, inst.	1570	160 00
	J. E. Boyd	November salary, inst.	1571	150 00
	C. L. Arnold	November salary, inst.	1572	130 00
	E. F. Coddington	November salary, inst.	1573	90 00
	H. W. Kuhn	November salary, inst.	1574	110 00
	S. E. Raser	November salary, inst.	1575	100 00
	W. B. Skimming	November salary, inst.	1576	90 00
	Wm. T. Magruder	November salary, inst.	1577	225 00
	E. A. Hitchcock	November salary, inst.	1578	175 00
	Horace Judd	November salary, inst.	1579	120 00
	Lloyd Yost	November salary, inst.	1580	30 00
	E. G. Bailey	November salary, inst.	1581	30 00
	N. W. Lord	November salary, inst.	1582	200 00
	E. E. Sommermeier	November salary, inst.	1583	110 00
	G. O. Spittler	November salary, inst.	1584	30 00
	Gustav Bruder	November salary, inst.	1585	20 00
	Frank Ray	November salary, inst.	1586	200 00
	T. B. Simon	November salary, inst.	1587	30 00
	G. B. Kauffman	November salary, inst.	1588	200 00
	C. A. Dye	November salary, inst.	1589	10 00
	W. H. Scott	November salary, inst.	1590	225 00
	T. H. Haines	November salary, inst.	1591	130 00
	A. E. Davies	November salary, inst.	1592	90 00
	C. M. Berryman	November salary, inst.	1593	85 00
	D. C. Huddleson	November salary, inst.	1594	80 00
	Alma H. Wacker	November salary, inst.	1595	7 50
	B. F. Thomas	November salary, inst.	1596	225 00
	A. D. Cole	November salary, inst.	1597	200 00
	F. E. Kester	November salary, inst.	1598	100 00
	L. B. Tuckerman	November salary, inst.	1599	70 00
	W. L. Graves	November salary, inst.	1600	130 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	G. H. McKnight	November salary, inst.	1601	130 00
	Clara Ewalt	November salary, inst.	1602	30 00
	F. J. Muirle	November salary, inst.	1603	30 00
	T. H. Dickenson	November salary, inst.	1604	110 00
	B. L. Bowen	November salary, inst.	1605	225 00
	Chas. A. Bruce	November salary, inst.	1606	150 00
	J. D. Batchelder	November salary, inst.	1607	120 00
	Hermine de Nagy	November salary, inst.	1608	30 00
	D. S. White	November salary, inst.	1609	190 00
	Paul Fischer	November salary, inst.	1610	180 00
	S. Sisson	November salary, inst.	1611	160 00
	O. V. Brumley	November salary, inst.	1612	85 00
	H. W. Brown	November salary, inst.	1613	30 00
	H. Osborn	November salary, inst.	1614	225 00
	J. S. Hine	November salary, inst.	1615	120 00
	F. L. Landacre	November salary, inst.	1616	120 00
	Otto H. Swezy	November salary, inst.	1617	30 00
	Max Morse	November salary, inst.	1618	15 00
	W. W. Boyd	November salary, inst.	1619	200 00
	Florence Price	November salary, inst.	1620	40 00
Dec. 1	Lily Weeks	Salary to Dec. 1, 1902	1621	24 00
2	F. W. Prentiss, Treas. .	Ctfs. falling due this date .	1622	30,000 00
	W. U. Telegraph Co. .	Telegrams	1623	4 61
	T. J. Godfrey	Expenses, meeting of board and commission	1624	19 75
	Ray Shearer	Store room card	1625	2 10
3	Ag. Stud. Publ. Co. .	Advertising	1626	80 00
	Jas. Westwater & Co. .	Estimate No. 2, Vet. Bldg. .	1627	3,610 00
5	D. W. McGrath	Estimate No. 2, Chem. Ad- dition	1628	4,085 00
	F. L. Allen	Campus work	1629	1 12
	O. S. U. Athletic Assn. .	Advertising	1630	10 00
	W. W. Boyd	Expenses	1631	91 10
	H. W. Brown	Currents	1632	2 50
	E. J. Beiling	Student labor	1633	16 92
	John E. Bender	Anatomy horses	1634	20 00
	Nathan Baker	Campus work	1635	3 43
	C. P. Burkey	Student labor	1636	5 50
	Hardin Blaney	Wheeling coal	1637	18 00
	Tracy Bartholomew .	Campus work	1638	1 68
	Guy Britton	Student labor	1639	2 25
	Linn Bartholomew .	Student labor	1640	50
	H. B. Brooks	Student labor	1641	20 37
	J. E. Bard	Labor	1642	8 34
	H. Cranston	Student labor	1643	1 50
	R. J. Carver	Student labor	1644	2 56
	H. W. Clark	Campus work	1645	1 56
	G. M. Cameron	Wiring	1646	1 19
	Alexis Cope	Expenses	1647	4 45
	C. M. Curtis	Student labor	1648	10 80
	H. L. Dowd	Student labor	1649	11 00
Dec. 5	Mary A. DeCamp	Work in library	1650	6 56
	W. O. Dean	Wiring	1651	7 28
	Wm. Essig	Carpenter work	1652	72 80
	J. E. Ensweiler	Correcting problems	1653	8 00
	Ida M. Fisher	Student labor	1654	16 00
	Wm. Fields	Campus work	1655	49 35
	N. S. Green	Campus work	1656	4 68
	W. D. Griffith	Campus work	1657	52 40
	Omer Glunt	Wiring	1658	1 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Lillian Huffman	Library work	1659	14 00
	E. E. Hyatt	Student labor	1660	3 40
	S. Hummon	Campus work	1661	14 06
	D. L. Hurst	Campus work	1662	27 56
	R. E. Hecker	Wiring	1663	2 55
	D. K. Hempstead	Student labor	1664	6 60
	Evaline Harrington	Library work	1665	5 00
	H. B. Henderson	Student labor	1666	16 20
	W. A. Kellerman	Dept. supplies	1667	26 96
	L. R. Lee	Campus work	1668	1 18
	Thos. K. Lewis	Prints	1669	60
	Helen B. Lambdin	Stenographer	1670	16 00
	C. L. Minor	Campus work	1671	1 43
	F. R. Main	Campus work	1672	2 87
	B. W. Mangum	Campus work	1673	4 90
	John Marling	Campus work	1674	5 62
	R. M. Martin	Labor	1675	5 00
	O. V. Maurer	Wiring	1676	1 23
	O. F. Metz	Janitor service	1677	15 15
	D. P. Moreton	Student labor	1678	19 20
	Clara G. Mark	Student labor	1679	9 75
	E. L. Orndorff	Laboratory assistance	1680	9 15
	Roy Pratt	Labor	1681	40 75
	L. O. Parker	Campus work	1682	2 25
	Ernest Pierce	Labor	1683	9 00
	C. C. Poindexter	Student labor	1684	4 25
	J. H. Randall	Carpenter work	1685	72 80
	W. H. Redhead	Labor	1686	14 30
	H. O. Rowe	Campus work	1687	9 06
	H. C. Ransower	Guide service	1688	2 75
	W. L. Roller	Labor	1689	2 80
	John A. Schneider	Carpenter work	1690	68 60
	J. A. Stiver	Guide service	1691	15 30
	W. Sample	Labor	1692	38 40
	B. O. Stingle	Campus work	1693	1 00
	C. E. Stinchcomb	Campus work	1694	7 06
	Ray Stockley	Wiring	1695	2 43
	A. Straub	Student labor	1696	4 56
	R. E. Shepard	Labor	1697	2 50
	Peter Schupp	Student labor	1698	8 00
	J. M. Taggart	Student labor	1699	1 25
	L. H. Strom	Guide service	1700	2 00
	J. L. Scott	Student labor	1701	8 84
	T. M. Sherman	Student labor	1702	10 80
	Roy Tonkinson	Student labor	1703	4 87
	L. F. Vaughan	Guide service	1704	5 25
	H. P. Weber	Labor	1705	46 20
	J. E. Weaver	Campus work	1706	7 34
	F. Webber	Correcting problems	1707	10 75
	S. Byron Williams	Student labor	1708	3 75
	David S. White	Supplies	1709	6 95
	S. P. Ward	Student labor	1710	6 26
9	Artrura Photo Paper Co.	Paper	1711	7 05
	J. S. Abbott & Co.	Hardware	1712	7 88
	Andrews & Barnes	Hangers and belt	1713	27 15
	Acme Paving Co.	Laying walks	1714	287 76
	Am. Sewer Pipe Co.	Pipe and sand	1715	18 30
	Bauman & Lind	Painting	1716	58 00
	Bryson & Son	Caning chair	1717	1 50
	H. Braun Sons & Co.	Chemical supplies	1718	215 38

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Borger Bros. & Co.	Furnace repair	1719	17 23
	Blackwood-Greene Co. ...	Repairs and cans	1720	14 65
	Columbus Gas Co.	Coke	1721	16 32
	C. O. Paper Co.	Manila	1722	1 00
	Champlin Printing Co. ...	Printing	1723	260 90
	Columbus Brass Co.	Brassets	1724	11 45
	The Corbett-Jones Co. ...	Kitchen tables	1725	3 50
	Central Ohio Oil Co. ...	Eng. oil	1726	9 45
	Columbus Litho Co.	Bonds	1727	35 00
	Cols. Sporting Goods Co	Striking bag, etc.	1728	5 50
	J. P. Carlile	Plaster	1729	2 50
	Case Mfg. Co.	Pulley	1730	1 35
	Cols. Iron & Steel Co. ...	Fire brick	1731	6 00
	Cols. M. & M. Supply Co.	Supplies	1732	31 78
	G. W. Clark & Co.	Poplar	1733	6 00
	Cap. City Mach. Works.	Supplies	1734	20 82
	Cols. Wire & Iron Wks..	Cloth and guard	1735	27 70
	Columbus Supply Co....	Supplies	1736	17 59
	Dunn, Taft & Co.	Supplies	1737	5 85
	Engelke & Bigelow	Freight, cartage, etc.	1738	149 90
	Erner & Hopkins	Elect. supplies	1739	4 74
	Elect. Supply & Const. Co.	Elect. supplies	1740	6 32
	Frankenberg Bros.	Metal boxes	1741	3 00
	James E. Fippin	Account of Leo Veit	1742	27 85
	F. W. Freeman	Groceries	1743	3 50
	Henry Goldsmith	Books	1744	2 00
	Griswold-Sohl Co.	Iron	1745	3 81
	A. G. Geren	Supplies	1746	6 25
	Francis Harris	Paper, etc.	1747	2 06
	Fred J. Heer	Printing	1748	31 40
	P. Hayden Saddlery Hdwe. Co.	Hardware	1749	16 83
	The Joyce Fish Co.	Perch	1750	3 00
Dec. 9	S. T. Knight	Moving and rep. Thomas house	1751	1,275 00
	Kauffman-Lattimer Co..	Chem. supplies	1752	172 59
	Kelton & Converse	Lumber	1753	5 18
	Krauss, Butler & Ben- ham Co.	Shades	1754	20 75
	The M. C. Lillie & Co..	Supplies	1755	30 90
	Lawrence Press Co.	Reports	1756	2 00
	Lynas Bros.	Supplies	1757	5 80
	Oscar S. Lear	Supplies	1758	5 00
	W. H. Miller & Co.	Supplies	1759	13 86
	Murray City Coal Co. ...	Coal	1760	1,515 29
	J. J. Marvin	Mill work	1761	378 03
	J. W. Meek	Repairs	1762	3 25
	Millers Fair	Supplies	1763	7 58
	Nitschke Bros.	Stationery	1764	39 40
	Ohio State Journal	Bond Adv.	1765	11 25
	Orr, Brown & Price ...	Chemical supplies	1766	59 88
	Ben D. Potts	Supplies	1767	14 90
	Penna. Fuel Co.	Cement	1768	9 73
	Pure Milk Co.	Milk, etc.	1769	2 22
	James Penn	Feed and hauling	1770	35 52
	Reeves Brothers	Locker hasps	1771	2 70
	Rood Lumber Co.	Sawdust	1772	1 50
	Ruggles, Gale & Co. ...	Books and pens	1773	13 00
	Seraphim, B. B. Co.	Binding	1774	203 10

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Schroth & Potter	Shades	1775	6 50
	Shilling Fdry. Co.	Castings	1776	4 77
	Standard Oil Co.	Oil	1777	15 65
	Spahr & Glenn	Printing	1778	33 50
	Schoedinger, Fearn & Co	Hardware	1779	16 05
	Andrew Spittal	Tester base	1780	3 75
	T. T. Tress	Repairing	1781	2 00
	Tracy, Wells & Co.	Pails, etc.	1782	10 35
	Tallmadge Hdwe. Co. ...	Hardware	1783	63 21
	Emil Wiederhold	Repairs	1784	1 50
	C. A. Williams	Lantern slides	1785	28 18
	J. M. & W. Westwater.	Supplies	1786	4 85
	Z. L. White	Muslin cloth	1787	4 29
	Wagner Typewriter Co..	Ribbons	1788	2 00
	Schoedinger & Fearn ...	Hardware	1789	21 53
	Am. Steam Gate & Valve Co.	Indicators	1790	112 15
	The A. H. Andrews Co..	Hyloplate	1791	272 20
	Armour Fertilizer Co. ...	Feed	1792	27 50
	Am. Entomological So- ciety	Proceedings	1793	4 00
	Burrows Bros. Co.	Books	1794	58 25
	The Bee Publ. Co.	Adv. Vet. Bldg.	1795	9 40
	Bausch-Lomb Opt. Co. ...	Supplies	1796	107 08
	A. S. Bell	Cow	1797	93 10
	H. D. Beavers	Cows	1798	275 00
	Baker & Adamson Chm. Co.	Supplies	1799	3 09
	Chicago Lab. Supply Co.	Supplies	1800	8 08
	R. Ellsworth Call	Reports	1801	3 26
	Crucible Steel Co.	Steel	1802	23 38
	Dodge, Haley & Co.	Supplies	1803	50 15
	Eimer & Amend	Supplies	1804	260 99
	Engineering & M. Jour- nal	Advertising	1805	8 29
	Gen'l App. & Chem. Co.	Microscopes	1806	108 75
	W. A. Graham Drug Store	Supplies	1807	1 25
	Glucose Sugar Ref. Co..	Feed	1808	48 00
	Herman Haerlin	Professional services	1809	18 60
	Henry Holt & Co.	Books	1810	3 27
	W. D. Hoard Co.	Advertising	1811	25 00
	Holophane Glass Co. ...	Globes	1812	33 60
	The Hileman James Co..	Packing	1813	18 75
	H. W. Johns-Manville Co.	Fuses	1814	1 56
	Kemp & Burpee Mfg Co.	Beater slats	1815	2 48
	The Lunkenheimer Co...	Cups and valves	1816	14 89
	Liberty Mfg. Co.	Cleaner	1817	50 00
	Library Bureau	Cards	1818	2 75
	H. Molyneux	Dockage	1819	8 00
	Montgomery, Ward & Co	Sharpening machine	1820	2 00
	Na't Stockman & Far- mer	Advertising	1821	99 78
	Nernst Lamp Co.	Lamps	1822	760 48
	The Ohio Farmer	Advertising	1823	63 00
	Oliver Chilled Plow Wks	Points	1824	3 40
	Post Glover Elect Co. .	Canopies, etc.	1825	4 50
	S. S. Robinson	Steers	1826	200 00
	Silver Burdett Co.	Book	1827	1 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Stumpf & Steurer	Adv. bond sale	1828	29 25
	G. E. Stechert	Books	1829	13 00
	Smith-Premier Type- writer Co.	Supplies	1830	4 30
	Standard Chain Co.	Iron	1831	36 34
	Smooth-on Mfg. Co.	Compound	1832	7 50
	Shough & Chrisman	Calves	1833	290 00
	E. R. Squibb & Sons	Supplies	1834	33 49
	Edw. Thompson Co.	Encyclopedia	1835	6 00
	Toledo Linseed Oil Co.	Oil meal	1836	73 50
	Arthur H. Thomas Co.	Supplies	1837	190 27
	Univ. of State of New York	Paleontology	1838	2 50
	Westinghouse Elect. Co.	Transformer	1839	126 40
	West Kieley Steam Spec- Co.	Trap	1840	12 50
	A. Wessels .....	.....	1841	75
	Westinghouse, E. & M. Co.	Motor	1842	170 00
	Western Elect. Inst. Co.	Valve meter	1843	6 65
	Whitall-Tatum Co.	Supplies	1844	10 50
8	Esther Hoover	Store room card	1845	3 94
9	E. M. Dare	Store room card	1846	64
10	S. M. Handley	Store room card	1847	1 06
	Eva B. Stamets	Store room card	1848	4 00
12	C. C. Huntington	November salary	1849	25 00
	F. M. Sharp	Store room card	1850	92
Dec. 15	Columbus Gas Co.	November gas	1851	187 35
	C. U. Telephone Co.	Phone rental	1852	22 50
	C. H. Woodruff	December salary, inst.	1853	70 00
	W. C. Mills	Postage	1854	1 00
17	W. O. Thompson	December salary, inst.	1855	416 67
	Alexis Cope	December salary, inst.	1856	187 50
19	Carl E. Steeb	December salary, inst.	1857	83 33
	K. H. Duncan	December salary, inst.	1858	66 66
	Edith D. Cockins	December salary, inst.	1859	66 66
	Edith R. Hubler	December salary, inst.	1860	40 00
	Gertrude Bellows	December salary, inst.	1861	35 00
	Wm. C. McCracken	December salary, inst.	1862	150 00
	Wm. Standley	December salary, inst.	1863	65 00
	Wm. Case	December salary, inst.	1864	55 00
	Benj. LeBay	December salary, inst.	1865	55 00
	Thomas Boude	December salary, inst.	1866	50 00
	Fred Brewer	December salary, inst.	1867	50 00
	Marion Peck	December salary, inst.	1868	50 00
	Geo. R. Rose	December salary, inst.	1869	75 00
	Earl Kimmel	December salary, inst.	1870	25 00
	Norman Slee	December salary, inst.	1871	20 00
	Chas. Lewis	December salary, inst.	1872	20 00
	J. V. Cranston	December salary, inst.	1873	45 00
	J. P. Covan	December salary, inst.	1874	83 33
	A. F. Hall	December salary, inst.	1875	73 33
	John Ricketts	December salary, inst.	1876	45 00
	Thos. E. Osburn	December salary, inst.	1877	45 00
	C. P. Souther	Money advanced	1878	1 00
	James Kelley	December salary, inst.	1879	30 00
	M. S. Harvey	December salary, inst.	1880	25 00
	H. H. Hamilton	December salary, inst.	1881	12 50
	F. E. Beutler	December salary, inst.	1882	12 50
	Raymond Pierce	December salary, inst.	1883	18 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	R. M. Martin	December salary, inst.	1884	20 00
	Chas. M. Hicks	December salary, inst.	1885	45 00
	Earl Conway	December salary, inst.	1886	25 00
	G. A. Goodspeed	December salary, inst.	1887	40 00
	Chester McClintock ...	December salary, inst.	1888	20 00
	John Brown	December salary, inst.	1889	25 00
	John Brown	December salary, inst.	1890	15 00
	Wm. R. Thomas	December salary, inst.	1891	40 00
	F. E. Fleischer	December salary, inst.	1892	40 00
	Wm. Whitestone	December salary, inst.	1893	40 00
	Harry Chantler	December salary, inst.	1894	40 00
	Wash Townsel	December salary, inst.	1895	20 00
	G. C. Denny	December salary, inst.	1896	40 00
	M. N. Cook	December salary, inst.	1897	40 00
	J. K. Pritner	December salary, inst.	1898	40 00
	H. M. Templin	December salary, inst.	1899	40 00
	Frances Andrix	December salary, inst.	1900	30 00
19	John W. Brown	December salary, inst.	1901	40 00
	Thos. F. Hunt	December salary, inst.	1902	250 00
	John W. Decker	December salary, inst.	1903	170 00
	Chas. S. Plumb	December salary, inst.	1904	200 00
	Frank Ruhlen	December salary, inst.	1905	90 00
	M. Miller	December salary, inst.	1906	100 00
	Laurel L. Hill	December salary, inst.	1907	33 33
	H. A. Weber	December salary, inst.	1908	225 00
	A. Vivian	December salary, inst.	1909	150 00
	R. Hirsch	December salary, inst.	1910	40 00
	Geo. W. Knight	December salary, inst.	1911	250 00
	Theo. C. Smith	December salary, inst.	1912	130 00
	Geo. W. Rightmire	December salary, inst.	1913	115 00
	A. M. Bleile	December salary, inst.	1914	225 00
	Chas. B. Morrey	December salary, inst.	1915	140 00
	M. Dresbach	December salary, inst.	1916	80 00
	R. J. Seymour	December salary, inst.	1917	25 00
	W. C. Mills	December salary, inst.	1918	40 00
	Pearl Coutellier	December salary, inst.	1919	10 00
	Jos. N. Bradford	December salary, inst.	1920	210 00
	Thos. E. French	December salary, inst.	1921	150 00
	Thos. F. Lewis	December salary, inst.	1922	100 00
	Silas Martin	December salary, inst.	1923	100 00
	J. H. Vosskuehler	December salary, inst.	1924	120 00
	Lucian Shaw	December salary, inst.	1925	30 00
	J. S. Tidball	December salary, inst.	1926	50 00
	H. C. Lord	December salary, inst.	1927	225 00
	W. A. Kellerman	December salary, inst.	1928	225 00
	J. H. Schaffner	December salary, inst.	1929	130 00
	Jas. G. Sanders	December salary, inst.	1930	25 00
	Harriett G. Burr	December salary, inst.	1931	25 00
	O. E. Jennings	December salary, inst.	1932	50 00
	James McOwen	December salary, inst.	1933	33 33
	S. A. Norton	December salary, inst.	1934	120 00
	Wm. McPherson	December salary, inst.	1935	225 00
	W. E. Henderson	December salary, inst.	1936	140 00
	C. W. Foulk	December salary, inst.	1937	120 00
	M. W. Mumma	December salary, inst.	1938	70 00
	Catharine E. Andrews ..	December salary, inst.	1939	30 00
20	C. E. Starlin	December salary, inst.	1940	60 00
19	C. E. Sherman	December salary, inst.	1941	180 00
	A. H. Heller	December salary, inst.	1942	180 00
	Frank H. Eno	December salary, inst.	1943	150 00
	W. L. Davies	December salary, inst.	1944	60 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Ray M. Royer	December salary, inst.	1945	62 50
	W. A. Landacre	December salary, inst.	1946	75 00
	Edward Orton, Jr.	December salary, inst.	1947	200 00
	A. V. Bleininger	December salary, inst.	1948	100 00
	Ellsworth Ogden	December salary, inst.	1949	20 00
	M. A. Stoner	December salary, inst.	1950	180 00
	C. P. Souther	December salary, inst.	1951	120 00
	Cora Elliott	December salary, inst.	1952	25 00
	F. C. Clark	December salary, inst.	1953	200 00
	J. E. Haggerty	December salary, inst.	1954	120 00
	F. H. Miesse	December salary, inst.	1955	30 00
	C. C. Huntington	December salary, inst.	1956	25 00
	D. R. Major	December salary, inst.	1957	160 00
	F. C. Caldwell	December salary, inst.	1958	190 00
	F. A. Fish	December salary, inst.	1959	110 00
	H. B. Brooks	December salary, inst.	1960	30 00
	A. C. Barrows	December salary, inst.	1961	225 00
	J. R. Taylor	December salary, inst.	1962	150 00
	W. H. Siebert	December salary, inst.	1963	190 00
	E. H. McNeal	December salary, inst.	1964	100 00
	Chas. S. Prosser	December salary, inst.	1965	190 00
	J. A. Bownocker	December salary, inst.	1966	160 00
	E. A. Eggers	December salary, inst.	1967	225 00
	Chas. W. Mesloh	December salary, inst.	1968	160 00
	B. A. Eisenlohr	December salary, inst.	1969	80 00
	Sarah Barrows	December salary, inst.	1970	40 00
	J. R. Smith	December salary, inst.	1971	225 00
	A. W. Hodgman	December salary, inst.	1972	160 00
	W. S. Elden	December salary, inst.	1973	130 00
	W. R. Lazenby	December salary, inst.	1974	225 00
	V. H. Davis	December salary, inst.	1975	83 33
	F. E. Sanborn	December salary, inst.	1976	200 00
	W. A. Knight	December salary, inst.	1977	120 00
	W. H. Renck	December salary, inst.	1978	100 00
	C. P. Crowe	December salary, inst.	1979	100 00
	W. Morelan	December salary, inst.	1980	30 00
	S. C. Derby	December salary, inst.	1981	225 00
	Wm. F. Hunter	December salary, inst.	1982	250 00
	J. H. Collins	December salary, inst.	1983	20 00
	J. A. Shauck	December salary, inst.	1984	100 00
	E. B. Kinkead	December salary, inst.	1985	130 00
	W. H. Page	December salary, inst.	1986	200 00
	E. O. Randall	December salary, inst.	1987	80 00
	E. D. Howard	December salary, inst.	1988	25 00
	Olive Jones	December salary, inst.	1989	145 00
	H. Townshend	December salary, inst.	1990	60 00
	Gertrude Kellicott	December salary, inst.	1991	60 00
	Maude Jeffrey	December salary, inst.	1992	60 00
	C. B. Guittard	December salary, inst.	1993	60 00
	Eliz. Smythe	December salary, inst.	1994	40 00
	Martha Hartford	December salary, inst.	1995	40 00
	J. C. Cone	December salary, inst.	1996	30 00
	R. D. Bohannon	December salary, inst.	1997	225 00
	G. W. McCoard	December salary, inst.	1998	160 00
	Jas. E. Boyd	December salary, inst.	1999	150 00
	C. L. Arnold	December salary, inst.	2000	130 00
	E. F. Coddington	December salary, inst.	2001	90 00
	H. W. Kuhn	December salary, inst.	2002	110 00
	S. E. Rasor	December salary, inst.	2003	100 00
	W. B. Skimming	December salary, inst.	2004	30 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Wm. T. Magruder	December salary, inst.	2005	225 00
	E. A. Hitchcock	December salary, inst.	2006	175 00
	Horace Judd	December salary, inst.	2007	120 00
	Lloyd Yost	December salary, inst.	2008	30 00
	E. G. Bailey	December salary, inst.	2009	30 00
	N. W. Lord	December salary, inst.	2010	200 00
	E. E. Sommermeier	December salary, inst.	2011	110 00
	G. O. Spittle	December salary, inst.	2012	30 00
	Gustav Bruder	December salary, inst.	2013	20 00
	Frank A. Ray	December salary, inst.	2014	200 00
	L. B. Simon	December salary, inst.	2015	30 00
	Geo. B. Kauffman	December salary, inst.	2016	200 00
	C. A. Dye	December salary, inst.	2017	110 00
	W. H. Scott	December salary, inst.	2018	225 00
	T. H. Haines	December salary, inst.	2019	130 00
	A. E. Davies	December salary, inst.	2020	90 00
	C. P. Linhart	December salary, inst.	2021	160 00
	C. M. Berryman	December salary, inst.	2022	85 00
	D. C. Huddleson	December salary, inst.	2023	80 00
	A. H. Wacker	December salary, inst.	2024	7 50
	B. F. Thomas	December salary, inst.	2025	225 00
	A. D. Cole	December salary, inst.	2026	200 00
	F. E. Kester	December salary, inst.	2027	100 00
	L. B. Tuckerman	December salary, inst.	2028	70 00
	J. V. Denney	December salary, inst.	2029	225 00
	W. L. Graves	December salary, inst.	2030	130 00
	G. H. McKnight	December salary, inst.	2031	130 00
	Gilbert Pennock	December salary, inst.	2032	30 00
	Clara C. Ewalt	December salary, inst.	2033	30 00
	F. J. Muirie	December salary, inst.	2034	30 00
	T. H. Dickenson	December salary, inst.	2035	110 00
	B. L. Bowen	December salary, inst.	2036	225 00
	Chas. C. Bruce	December salary, inst.	2037	150 00
	J. D. Batchelder	December salary, inst.	2038	120 00
	Hermine DeNagy	December salary, inst.	2039	30 00
	D. S. White	December salary, inst.	2040	190 00
	Paul Fischer	December salary, inst.	2041	180 00
	S. Sisson	December salary, inst.	2042	160 00
	O. V. Brumley	December salary, inst.	2043	85 00
	H. W. Brown	December salary, inst.	2044	30 00
	Herbert Osborn	December salary, inst.	2045	225 00
	Jas. S. Hine	December salary, inst.	2046	120 00
	F. L. Landacre	December salary, inst.	2047	120 00
	Otto H. Swezy	December salary, inst.	2048	30 00
	Max Morse	December salary, inst.	2049	15 00
	W. W. Boyd	December salary, inst.	2050	200 00
	Florence Price	December salary, inst.	2051	40 00
	Lily Weeks	December salary, inst.	2052	27 00
	Mildred Waters	December salary, inst.	2053	35 00
	Helen Lambdin	December salary, inst.	2054	16 00
	Mayne F. Hill	Instruction	2055	5 00
	C. M. Curtis	Hauling water	2056	5 85
	Harold Judson	Student labor	2057	7 80
18	Jos. A. Stiver	Guide work	2058	11 10
	B. O. Stengle	Campus work	2059	3 12
	W. L. Roller	Student labor	2060	5 38
	Jno. M. Harsh	Laboratory work	2061	1 42
	L. W. Funk	Student labor	2062	26 80
20	Jno. E. Bender	Fees at Vet. clinic	2063	26 91
	H. C. Ransower	Guide service	2064	1 19
	J. E. Ensweiler	Correcting problems	2065	5 12

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	F. Webber	Correcting problems	2066	6 75
	C. D. Shoemaker	Battalion clerk	2067	10 00
	R. A. Stephenson	Names of occupants V. M. L.	2068	2 00
22	T. W. Holloway	Labor	2069	13 65
	O. F. Metz	Student labor	2070	6 90
	E. D. Easton	Laboratory assistance	2071	12 80
	G. B. Ackerman	Laboratory assistance	2072	2 55
23	Cols. Railway Co.	Car tickets	2073	5 00
	W. F. Coover	Laboratory assistance	2074	55 60
27	D. W. McGrath	Estimate No. 3, Add'n to Chem. Bldg.	2075	5,225 00
	James Westwater & Co..	Estimate No. 3, Vet. Bldg..	2076	4,370 00
29	Library Bureau	Furniture, law library ..	2077	2,145 00
	Peters, Burns & Pretz- inger	On account for services as architects	2078	2,500 00
30	Minnie F. Hines	December salary	2079	15 00
31	D. M. Massie	Expenses as trustee	2080	11 43
1903				
Jan. 1	John T. Mack	Exp. at meetings of board.	2081	21 20
	E. L. Orndorf	Laboratory assistance	2082	4 65
	M. A. Stoner	Supplies, Dom. Sci.	2083	5 00
	Cora Elliott	Washing curtains	2084	2 00
	Mildred Waters	Stenog. service	2085	3 40
	Hardin Blaney	29 days, wheeling coal ..	2086	43 50
	Wilbur Sample	9 days, work on coal crusher	2087	14 40
	S. P. Ward	7 hours work	2088	1 50
	Roy Pratt	21 days, helper to steam- fitter	2089	31 50
	Wm. Garrett	21 days helping fireman ..	2090	31 50
	W. F. Hunter	Cash paid for moving books	2091	2 00
	C. H. Kerr	27 hours guide service....	2092	3 38
	Helen B. Lambdin	Clerical services	2093	8 00
	C. B. Burkey	72 1-2 hours work in Law library	2094	7 25
	Mrs. S. A. Miller	Book	2095	1 00
	James Penn	Hauling books	2096	1 50
	J. T. Pratt	150 hrs. work in library ..	2097	12 90
	T. M. Sherman	66 hrs. work in library ..	2098	6 60
	H. C. Lord	Repairing calorimeter	2099	20 00
	D. H. Whitman	Laboratory assistance	2100	21 00
	Clara M. Berryman	Music, gymnasium	2101	8 50
	Mahlon E. Barr	43 hrs. elec. wiring @ 20c.	2102	8 60
	E. J. Billings	7 da. work @ \$1.75	2103	13 12
	John Graft	29 da. work @ \$1.50	2104	43 50
	Sherman Seagraves	10 da. work @ \$1.50	2105	15 00
	Robt. M. Rownd	Postage stamps	2106	18 00
2	Cap. City Mach. Works.	Machine parts, etc.	2107	16 85
	The Tallmadge Hdwe. Co.	Hardware	2108	6 40
	McClelland & Co.	Stationery	2109	5 35
	Hofman Supply Co.	Emery paper	2110	40
	Cols. Carriage Hdw. Co.	Castings	2111	7 38
	The Erner-Hopkins Co.	Lamps, etc.	2112	2 89
	The Corbett & Jones Co.	24 stools	2113	11 00
	The Bowden Towell Supply Co.	Towels	2114	43
	Champlin Printing Co. .	.....	2115	5 75

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	McClelland & Co.	Neostyle paper	2116	3 30
	James Penn	Hay and hauling	2117	12 75
	Nitschke Bros.	Stationery and blanks	2118	21 68
	American Sewer Pipe Co	Sand and cement	2119	26 25
	Cols. Mill and Mine Sup- ply Co.	Hose and fittings	2120	54 64
	Geo. D. Cross Lumber Co.	Lumber	2121	180 87
	The Cols. Supply Co. ..	Fittings	2122	18 73
	The Ruggles-Gale Co. ...	Blank books and sta.	2123	11 00
	E. A. Cole & Co.	Coal	2124	86 00
	Taylor, Williams & Co. .	Coal and coke	2125	50 26
	W. J. Davidson	Feed	2126	30 15
	Vogelgesang Furnace Co	Rep. furnace	2127	1 50
	Emil Wiederhold	Tuning piano	2128	2 00
	Columbus Gas Co.	Gas fitting and coke	2129	56 30
	Spahr & Glenn	Cards and stationery	2130	29 00
	Wagner Typewriter Co..	Underwood typewriter ...	2131	70 00
	The Krauss, Butler & Benham Co.	516 yds. cork carpet	2132	554 70
	The Cols. Transfer Co. .	Hauling furniture	2133	30 00
	The E. B. Lanman Co. .	Iron	2134	1 50
	J. S. Abbott & Co.	Hardware	2135	7 40
	Columbus Macadam Co.	30 bu. lime	2136	5 40
	Borger Bros & Co.	Plate steel	2137	5 00
	Logan McCormick	Framing pictures	2138	3 20
	Standard Oil Co.	Oil	2139	11 58
	Cols. Forge & Iron Co..	Vises	2140	31 27
	The Hall-Collins Hdw. Co.	Sad irons	2141	2 60
	Bowden Towel Supply Co.	Towels	2142	2 25
	Pure Milk Co.	Milk	2143	2 70
	Seraphim Blank Book Co.	Binding	2144	16 80
	The Cols. Brass Co.	Fittings	2145	2 42
	Champlin Printing Co..	Record cards	2146	7 50
	Jeffrey Mfg. Co.	Coal crusher	2147	715 00
	Schoedinger, Fearn & Co	Hardware	2148	4 84
	Capital City Mach. Wks	Bolts, pulleys, etc.	2149	57 49
	The Tallmadge Hdwe.	Hardware	2150	6 88
	F. E. Beutler	44 hrs. elec. wiring @ 20c.	2151	8 80
	Blackwood, Green & Co.	Galv. iron work	2152	15 05
	Wagner Typewriter Co..	Cleaning machine	2153	3 25
	The Erner-Hopkins Co..	Elec. supplies	2154	32 32
	Bausch & Lomb Opt. Co.	Microtome	2155	62 25
	Payne-McDonald Hdw.	Paint brush, etc.	2156	1 20
	Frederick W. Freeman.	Groceries	2157	23 53
	Gen'l Apparatus Chem. Co.	Discs and covers	2158	9 00
	W. H. Loudermilk & Co.	Poore's Manual Railways	2159	25 00
	Library Bureau	Cards and subscription ..	2160	3 75
	H. W. Johns-Manville Co.	Pipe covering	2161	201 18
	Brimley Bros.	Star fish	2162	10 00
	B. H. Wiegell & Sons	Jars	2163	1 15
	Jarecki Mfg. Co.	Radiators, etc.	2164	181 35
	E. B. Myrowitz	Model of eye and charts ..	2165	7 70
	Water Governor Co.	Lining and piston	2166	4 63
	Congdon & Britnell	Book	2167	2 25

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Crosby Steam Gage & Valve Co.	Indicator cards	2168	4 00
	James P. Haney	Book	2169	3 00
	Allen Maynard	Book	2170	1 00
	The International Quarterly	Subscription	2171	4 00
	The Burrows Bros. Co. National Educational Association	Books	2172	6 75
	W. H. Anderson & Co.	Copy of proceedings	2173	2 00
	Gustav E. Stechert	Books	2174	56 75
	Am. Soc. Mech. Engineers	Books	2175	73 48
	The Technology Quarterly	Copy of proceedings	2176	6 00
	The Boston Book Co.	Proc. Society of Arts	2177	6 00
	The Burrows Bros. Co.	13 vols. Practical Engineer Books	2178	23 00
	Congdon & Britnell	Books	2179	35 31
	Statute Law Book Co.	Books	2180	5 00
	Geo. R. Swain	Books	2181	140 00
	Webb Staty. & Prg. Co.	Lantern slides	2182	25 20
	The Finished Steel Co.	Letter copy book	2183	3 50
	Gay & Ward	Steel	2184	20 14
	The E. A. Kinsey Co.	Gear cutters	2185	8 19
	Murphy Iron Works	Machinery steel	2186	27 74
	The Dean Steam Pump Co.	Grate bars	2187	40 00
	University State of New York	Water cylinders	2188	18 00
	A. Thompson & Co.	Baldwin Geol. map of New York	2189	2 50
	Lawton & Co.	Ideal lantern and attachments	2190	116 20
	Cleveland Twist Drill Co.	Paper, etc.	2191	5 25
	U. T. Hungerford Brass & Copper Co.	Drills	2192	68
	Crucible Steel Co.	Brass rods	2193	33 41
	Fred Blankner, Agent for Ohio	Tool steel	2194	53 09
5	Neil House	250 yards carpet @ 23c	2195	57 50
	John A. Schneider	6 dinners, trustees, Nov. 6, 1902	2196	3 00
	William Essig	216 hrs. carp. work @ 35c.	2197	75 60
	J. H. Randall	212 hrs. carp. work @ 35c.	2198	74 20
8	Cabinet and drawers ..	208 hrs. carp. work @ 35c.	2199	72 80
	George Riley	Amer. Type Founders Co.	2200	54 15
	The Cols. Gas Co.	5 da. helping remove furniture	2201	10 00
	L. W. Funk	Gas. Dec., 1902	2202	194 18
	C. S. Plumb	111 hrs. work in store room ..	2203	22 20
	F. S. Allen	Exp. trip to Chicago and Indiana	2204	23 25
9	Nathan Baker	7½ hrs. work @ 12½c.	2205	1 18
	M. E. Barr	17 hrs. work @ 12½c.	2206	2 12
	C. M. Curtis	8½ hrs. work @ 12½c.	2207	1 06
	H. W. Clark	18½ hrs. work @ 12½c.	2208	2 31
	R. J. Carver	10 hrs. work @ 12½c.	2209	1 25
	Harry Cranston	10 hrs. work @ 12½c.	2210	1 25
	W. O. Dean	78 hrs. work @ 15c.	2211	11 70
		32½ hrs. work @ 15c.	2212	4 87

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	From whom received	For what purpose	Amount	Total
	Wm. Fields	34 hrs. man and team @ 35c	2213	11 90
	W. D. Griffith	91½ hrs. work @ 20c	2214	18 30
	D. L. Hurst	88 hrs. work @ 12½c	2215	11 00
	E. E. Hyatt	17½ hrs. work @ 12½c	2216	2 18
	Simon Hammon	77 hrs. work @ 12½c	2217	9 62
	Ralph E. Hecker	31 hrs. work @ 15c. and car fare 30c	2218	4 95
	A. L. Harrington	111 hrs. work @ 25c	2219	27 75
	W. G. Jenkins	46 3-4 hrs. work @ 12½c	2220	5 84
	F. C. Ladrach	13½ hrs. work @ 12½c	2221	1 68
	John Marling	25 hrs. work @ 12½c	2222	3 12
	O. V. Maurer	75 hrs. work @ 15c	2223	11 25
	J. F. Robinson	9 hrs. work @ 12½c	2224	1 12
	L. M. Smith	13 hrs. work @ 12½c	2225	1 62
	L. E. Stinchcomb	9 hrs. work @ 12½c	2226	1 12
	James L. Scott	28 hrs. work @ 15c	2227	4 23
	A. A. Straub	21 3-4 hrs. work @ 12½c	2228	2 71
	J. R. Thomas	10½ hrs. work @ 12½c	2229	1 31
	O. H. Tressett	73 hrs. work @ 12½c	2230	9 12
	H. P. Weber	24 hrs. work, man and team @ 35c	2231	8 40
	S. P. Ward	31 1-4 hrs. work @ 12½c	2232	3 93
10	W. W. Boyd	Expense	2233	61 60
12	F. W. Nelson	Wheeling coal	2234	1 50
	U. S. Telephone Co.	Toll service	2235	80
13	Hardin Blaney	Wheeling coal	2236	13 50
14	R. M. Rownd, P. M.	Stamps	2237	20 00
	Cols. Citz. Tel. Co.	Phone rental to 5-31-1903 ..	2238	120 80
15	Am. Arithmometer Co.	Burroughs adding machine No. 13648	2239	375 00
2	The Cols. Brass Co.	Balance due on supplies ..	2240	2 00
16	Sam'l C. Dery	Books, etc.	2241	4 87
	W. D. Guilbert, Auditor.	Copies survey	2242	5 00
20	Murray City Coal Co.	Coal	2243	2,393 65
23	F. H. Eno	January salary	2244	150 00
	Alexis Cope	January salary	2245	187 50
	Westinghouse E. & M. Co.	Transformer	2246	190 08
	R. M. Round, P. M.	Envelopes	2247	42 80
	H. A. Weber	January salary	2248	225 00
	Edith R. Hubler	January salary	2249	40 00
17	Carl E. Steeb	January salary	2250	83 33
26	C. P. Linhart	January salary	2251	160 00
	C. E. Starlin	3-4 January salary	2252	22 50
27	John H. Grove	Insurance premium	2253	12 35
31	W. O. Thompson	January salary, inst.	2254	416 67
27	K. H. Duncan	January salary, inst.	2255	66 66
31	Edith D. Cockins	January salary, inst.	2256	66 66
	Minnie F. Hines	January salary, inst.	2257	40 00
	Metta Seymour	January salary, inst.	2258	10 00
	Wm. C. McCracken	January salary, inst.	2259	150 00
	Wm. Standley	January salary, inst.	2260	65 00
	Wm. Case	January salary, inst.	2261	55 00
	Benj. LeBay	January salary, inst.	2262	55 00
	Thos. Boude	January salary, inst.	2263	50 00
	Fred Brewer	January salary, inst.	2264	50 00
	Marion Peck	January salary, inst.	2265	50 00
	Geo. R. Rose	January salary, inst.	2266	75 00
	Earl Kimmell	January salary, inst.	2267	25 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Norman Slee	January salary, inst.	2268	20 00
	Charles Lewis	January salary, inst.	2269	20 00
	J. V. Cranston	January salary, inst.	2270	45 00
	C. H. Woodruff	January salary, inst.	2271	70 00
	J. P. Covan	January salary, inst.	2272	83 33
	A. F. Hall	January salary, inst.	2273	73 33
	John Ricketts	January salary, inst.	2274	45 00
	Thos. E. Osburn	January salary, inst.	2275	45 00
	James Kelley	January salary, inst.	2276	30 00
	M. S. Harvey	January salary, inst.	2277	25 00
	H. H. Hamilton	January salary, inst.	2278	12 50
	F. E. Beutler	January salary, inst.	2279	13 50
	Ray Peirce	January salary, inst.	2280	18 00
	R. M. Martin	January salary, inst.	2281	20 00
	Chas. Hicks	January salary, inst.	2282	45 00
	Earl Conway	January salary, inst.	2283	25 00
	G. A. Goodspeed	January salary, inst.	2284	40 00
	Chester McClintock	January salary, inst.	2285	20 00
	John Brown	January salary, inst.	2286	25 00
	John Brown	January salary, inst.	2287	15 00
	W. R. Thomas	January salary, inst.	2288	40 00
	F. E. Fleischer	January salary, inst.	2289	40 00
	Wm. Whitestine	January salary, inst.	2290	40 00
	H. Chantler	January salary, inst.	2291	40 00
	Wash Townsel	January salary, inst.	2292	20 00
	G. C. Denny	January salary, inst.	2293	40 00
	M. N. Cook	January salary, inst.	2294	40 00
	J. K. Pritner	January salary, inst.	2295	40 00
	H. M. Templin	January salary, inst.	2296	40 00
	John W. Brown	January salary, inst.	2297	40 00
	Frances Andrix	January salary, inst.	2298	25 00
	Thos. F. Hunt	January salary, inst.	2299	250 00
	John W. Decker	January salary, inst.	2300	170 00
31	Charles S. Plumb	January salary, inst.	2301	200 00
	Frank Ruhlen	January salary, inst.	2302	90 00
	M. F. Miller	January salary, inst.	2303	100 00
	B. B. Herrick	January salary, inst.	2304	66 66
	D. A. Crowner	January salary, inst.	2305	66 66
	Laurel L. Hill	January salary, inst.	2306	33 33
	Alfred Vivian	January salary, inst.	2307	150 00
	Rudolph Hirsch	January salary, inst.	2308	40 00
	Geo. W. Knight	January salary, inst.	2309	250 00
	Theo. C. Smith	January salary, inst.	2310	130 00
	Geo. W. Rightmire	January salary, inst.	2311	115 00
	A. M. Belle	January salary, inst.	2312	225 00
	Chas. B. Morrey	January salary, inst.	2313	140 00
	M. Dresbach	January salary, inst.	2314	80 00
	R. J. Seymour	January salary, inst.	2315	25 00
	W. C. Mills	January salary, inst.	2316	40 00
	Pearl Coutellier	January salary, inst.	2317	10 00
	Jos. N. Bradford	January salary, inst.	2318	210 00
	Thos. E. French	January salary, inst.	2319	150 00
	Thos. K. Lewis	January salary, inst.	2320	100 00
	S. Martin	January salary, inst.	2321	100 00
	J. H. Vosskuehler	January salary, inst.	2322	120 00
	Lucian Shaw	January salary, inst.	2323	30 00
	J. S. Tidball	January salary, inst.	2324	50 00
	H. C. Lord	January salary, inst.	2325	225 00
	W. A. Kellerman	January salary, inst.	2326	225 00
	J. H. Schaffner	January salary, inst.	2327	130 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	J. G. Sanders	January salary, inst.	2328	25 00
	Harriet G. Burr	January salary, inst.	2329	25 00
	O. E. Jennings	January salary, inst.	2330	50 00
	Jas. McOwen	January salary, inst.	2331	33 33
	S. A. Norton	January salary, inst.	2332	120 00
	Wm. McPherson	January salary, inst.	2333	225 00
	W. E. Henderson	January salary, inst.	2334	140 00
	C. W. Foulk	January salary, inst.	2335	120 00
	M. W. Mumma	January salary, inst.	2336	70 00
	Catharine E. Andrews ..	January salary, inst.	2337	30 00
	E. N. Webb	January salary, inst.	2338	60 00
	W. F. Coover	January salary, inst.	2339	30 00
	C. E. Sherman	January salary, inst.	2340	180 00
	A. H. Heller	January salary, inst.	2341	180 00
	F. H. Eno	January salary, inst.	2342	150 00
	W. L. Davies	January salary, inst.	2343	60 00
	Ray M. Royer	January salary, inst.	2344	62 50
	W. A. Landacre	January salary, inst.	2345	75 00
	Edw. Orton, Jr.	January salary, inst.	2346	200 00
	A. V. Bleininger	January salary, inst.	2347	100 00
	E. Ogden	January salary, inst.	2348	20 00
	M. A. Stoner	January salary, inst.	2349	180 00
	C. P. Souther	January salary, inst.	2350	120 00
	Cora Elliott	January salary, inst.	2351	25 00
	F. C. Clark	January salary, inst.	2352	200 00
	J. E. Hagerty	January salary, inst.	2353	120 00
	F. H. Miesse	January salary, inst.	2354	30 00
	C. C. Huntington	January salary, inst.	2355	25 00
	D. R. Major	January salary, inst.	2356	160 00
	F. C. Caldwell	January salary, inst.	2357	190 00
	F. A. Fish	January salary, inst.	2358	110 00
	H. B. Brooks	January salary, inst.	2359	30 00
	A. C. Barrows	January salary, inst.	2360	225 00
	J. R. Taylor	January salary, inst.	2361	150 00
	W. H. Siebert	January salary, inst.	2362	180 00
	E. H. McNeal	January salary, inst.	2363	100 00
	Chas. S. Prosser	January salary, inst.	2364	190 00
	J. A. Bownocker	January salary, inst.	2365	160 00
	E. A. Eggers	January salary, inst.	2366	225 00
	C. W. Mesloh	January salary, inst.	2367	160 00
	B. A. Eisenlohr	January salary, inst.	2368	80 00
	Sarah Barrows	January salary, inst.	2369	40 00
	J. R. Smith	January salary, inst.	2370	225 00
	A. W. Hodgman	January salary, inst.	2371	160 00
	W. S. Elden	January salary, inst.	2372	130 00
	W. R. Lazenby	January salary, inst.	2373	225 00
	V. H. Davis	January salary, inst.	2374	83 33
	F. E. Sanborn	January salary, inst.	2375	200 00
	W. A. Knight	January salary, inst.	2376	120 00
	W. R. Renck	January salary, inst.	2377	100 00
	C. P. Crowe	January salary, inst.	2378	100 00
	W. Morelan	January salary, inst.	2379	30 00
27	W. U. Telegraph Co.	Telegrams	2380	4 06
31	S. C. Derby	January salary, inst.	2381	225 00
	Wm. F. Hunter	January salary, inst.	2382	250 00
	J. H. Collins	January salary, inst.	2383	20 00
	J. A. Shauck	January salary, inst.	2384	100 00
	E. B. Kinkead	January salary, inst.	2385	130 00
	W. H. Page	January salary, inst.	2386	200 00
	E. O. Randall	January salary, inst.	2387	80 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	E. D. Howard	January salary, inst.	2388	25 00
	Olive Jones	January salary, inst.	2389	145 00
	Harriett Townshend	January salary, inst.	2390	60 00
	Gertrude Kellicott	January salary, inst.	2391	60 00
	Maude Jeffrey	January salary, inst.	2392	60 00
	C. B. Guittard	January salary, inst.	2393	60 00
	Elizabeth Smythe	January salary, inst.	2394	40 00
	Martha Hartford	January salary, inst.	2395	40 00
	J. C. Cone	January salary, inst.	2396	30 00
	R. D. Bohannon	January salary, inst.	2397	225 00
	Geo. McCoard	January salary, inst.	2398	160 00
	Jas. E. Boyd	January salary, inst.	2399	150 00
	C. L. Arnold	January salary, inst.	2400	130 00
	E. F. Coddington	January salary, inst.	2401	90 00
	H. W. Kuhn	January salary, inst.	2402	110 00
	S. E. Raser	January salary, inst.	2403	100 00
	W. B. Skimming	January salary, inst.	2404	30 00
	Wm. T. Magruder	January salary, inst.	2405	225 00
	E. A. Hitchcock	January salary, inst.	2406	175 00
	Horace Judd	January salary, inst.	2407	120 00
	Lloyd Yost	January salary, inst.	2408	30 00
	E. G. Bailey	January salary, inst.	2409	30 00
	N. W. Lord	January salary, inst.	2410	200 00
	E. E. Sommermeier	January salary, inst.	2411	110 00
	G. O. Spittler	January salary, inst.	2412	30 00
	Gustav Bruder	January salary, inst.	2413	20 00
	Frank A. Ray	January salary, inst.	2414	200 00
	L. B. Simon	January salary, inst.	2415	30 00
	Geo. B. Kauffman	January salary, inst.	2416	200 00
	C. A. Dye	January salary, inst.	2417	110 00
	W. H. Scott	January salary, inst.	2418	225 00
	T. Harvey Haines	January salary, inst.	2419	130 00
	A. E. Davies	January salary, inst.	2420	90 00
	C. M. Berryman	January salary, inst.	2421	85 00
	D. C. Huddleson	January salary, inst.	2422	80 00
	Alma H. Wacker	January salary, inst.	2423	7 50
	B. F. Thomas	January salary, inst.	2424	225 00
	A. D. Cole	January salary, inst.	2425	200 00
	F. E. Kester	January salary, inst.	2426	100 00
	L. B. Tuckerman	January salary, inst.	2427	70 00
	J. V. Denney	January salary, inst.	2428	225 00
	W. L. Graves	January salary, inst.	2429	130 00
	G. H. McKnight	January salary, inst.	2430	130 00
	Gilbert Pennock	January salary, inst.	2431	30 00
	Clara C. Ewalt	January salary, inst.	2432	30 00
	F. J. Muir	January salary, inst.	2433	30 00
	T. H. Dickenson	January salary, inst.	2434	110 00
	B. L. Bowen	January salary, inst.	2435	225 00
	Chas. A. Bruce	January salary, inst.	2436	150 00
	J. D. Batchelder	January salary, inst.	2437	120 00
	Herman de Nagy	January salary, inst.	2438	30 00
28	The State of Ohio	Endowment of Fellowship, C. of E.	2439	5,000 00
31	D. S. White	January salary, inst.	2440	190 00
	Paul Fischer	January salary, inst.	2441	180 00
	S. Sisson	January salary, inst.	2442	160 00
	O. V. Brumley	January salary, inst.	2443	85 00
	H. W. Brown	January salary, inst.	2444	30 00
	H. Osborn	January salary, inst.	2445	225 00
	Jas. S. Hine	January salary, inst.	2446	120 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	F. L. Landacre	January salary, inst.	2447	120 00
	Otto H. Swezy	January salary, inst.	2448	30 00
	Max Morse	January salary, inst.	2449	15 00
	Helen Lambdin	January salary, inst.	2450	8 00
	W. W. Boyd	January salary, inst.	2451	200 00
	Florence Price	January salary, inst.	2452	40 00
	M. Waters	January salary, inst.	2453	35 00
	Lily Weeks	January salary, inst.	2454	27 00
	Gertrude Bellows	January salary, inst.	2455	35 00
29	Wm. Whitestone	Squirrel feed	2456	4 00
31	H. D. Browning	January salary, 1903	2457	125 00
Feb. 4	D. W. McGrath	Estimate No. 4, Chem. Add	2458	2,090 00
	Chas. C. Wilcox	Battalion clerk	2459	10 00
6	Columbus Gas Co.	January gas	2460	181 58
	C. U. Telephone Co. ....	.....	2461	8 00
	Annie B. Ayers	Stenographer	2462	6 60
	C. B. Ackerman	Laboratory work	2463	3 75
	Guy Britton	Weather observations	2464	2 00
	H. B. Brooks	Quiz work	2465	10 00
	Mahlon Barr	Student labor	2466	23 10
	Florence L. Bell	Clerical work	2467	6 35
	E. J. Billings	Student labor	2468	18 37
	J. E. Bender	Anatomy horses, etc.	2469	12 00
	W. W. Boyd	Expenses	2470	95 40
	C. P. Burkey	Student labor	2471	11 23
	F. E. Beutler	Student labor	2472	13 62
	G. A. Crayton	Labor	2473	1 00
	Harry Cranston	Labor	2474	16 14
	F. L. Davis	Adv. in Directory Y. M. C. A.	2475	5 00
	Effer Duncan	Clerical work	2476	11 10
	H. L. Doud	Labor	2477	13 60
	Mary A. DeCamp	Library work	2478	11 69
	M. Dresbach	Feed	2479	11 44
	W. O. Dean	Wiring	2480	2 40
	Wm. Essig	Carpenter work	2481	68 60
	Grace Eagleson	Clerical work	2482	14 20
	J. E. Ensweiler	Correcting problems	2483	6 00
	E. D. Easton	Laboratory work	2484	6 40
	Wm. Fields	Campus work	2485	22 40
	Charles S. Fischer	Guide work	2486	3 38
	Paul Fischer	Money advanced	2487	2 25
	Charles H. Flory	Student labor	2488	4 00
	E. E. Finney	Student labor	2489	4 50
	W. D. Griffith	Campus work	2490	17 02
	John Graft	Wheeling	2491	39 00
	William Garrett	Part payment No. 2492, labor	2492	28 31
	J. A. Garretson	Student labor	2493	1 20
	Evaline Harrington	Laboratory work	2494	8 19
	W. E. Hosler	Library work	2495	9 48
	D. L. Hurst	Campus work	2496	8 12
	Laurel L. Hill	Clerical work	2497	10 00
	True Houser	Student labor	2498	3 75
	T. W. Holloway	Student labor	2499	1 35
	H. B. Henderson	Laboratory work	2500	8 60
6	A. L. Harrington	Student labor	2501	8 24
	R. E. Hecker	Student labor	2502	2 70
	W. Guy Jenkins	Student labor	2503	1 55
	C. H. Kerr	Guide service	2504	75

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	F. R. Kunkle	Student labor	2505	91 12
	W. R. Lazenby	Supplies	2506	5 10
	R. M. Martin	Labor	2507	5 00
	E. R. Minns	Guide service	2508	2 38
	Clara G. Mark	Student labor	2509	9 25
	O. F. Metz	Janitor work	2510	16 50
	D. J. Monosmith	Labor	2511	9 00
	E. F. Mangold	Labor	2512	25 00
	M. F. Miller	Money advanced	2513	5 52
	O. V. Maurer	Student labor	2514	2 25
	Roy Pratt	Labor	2515	52 50
	Marion Peck	Labor	2516	9 55
5	Batterson Decorative House	Papering Thomas house..	2517	62 30
	Batterson Decorative House	Papering, etc.	2518	22 80
6	C. C. Poindexter	Student labor	2519	4 50
	J. H. Randall	Carpenter work	2520	70 00
	W. H. Redhead	Labor	2531	5 25
	L. H. Strom	Student labor	2522	4 00
	J. A. Schneider	Carpenter work	2523	67 20
	R. E. Shepard	Labor	2524	1 13
	Sherman Seagrave	Labor	2525	52 50
	James Stainbrook	Labor	2526	50 00
	R. M. Sellars	Student labor	2527	11 55
	James L. Scott	Student labor	2528	11 18
	C. E. Sherman	Money advanced	2529	5 25
	G. L. Shipps	Student labor	2530	3 05
	Jos. A. Stiver	Guide service	2531	27 75
	Peter V. Schupp	Student labor	2532	8 75
	O. H. Tresselt	Student labor	2533	6 62
	H. P. Weber	Campus work	2534	15 75
	A. J. Wagner	Student labor	2535	4 50
	F. M. Webber	Student labor	2536	10 00
	S. P. Ward	Student labor	2537	2 92
	J. E. Bard	Feed and labor	2538	5 30
	The Lantern	Advt.	2539	58 34
	J. McLain Smith	Expenses as trustee	2540	30 20
7	Artrura Photo Paper Co.	Paper	2541	6 15
	Acme Paving Co.	Cement	2542	1 50
6	Am. Machine Co.	Typewriter	2543	73 25
	J. S. Abbott & Co.	Pincers	2544	2 00
7	Sam'l Butler & Co.	Soap	2545	14 23
	Buckeye Brass Fdry.	Castings	2546	13 31
	Bishop, Jones & Co.	Milk cans	2547	46 00
	Wm. Burdell, Jr.	Boots	2548	24 00
	Bucher Eng. & Mfg. Co.	Half tones	2549	2 10
	Blackwood-Green Co.	Hardware	2550	24 19
7	Bowden Towel Supply Co.	Towels	2551	96 11
	H. Braun, Sons & Co.	Chem. supplies, etc.	2552	161 36
	The H. Cole Co.	Blue prints	2553	7 28
	Cols. Brass Co.	Towel racks	2554	2 92
	Citizens' Publ. Co.	Advertisement	2555	9 00
	G. W. Clarke & Co.	Lumber	2556	33 08
	Cols. Sporting Goods Co.	Basket ball	2557	12 19
6	William Garrett	Part pay't No. 2492, labor	2558	12 19
7	Cols. Dry Goods Co.	Cheese cloth	2559	6 00
	Columbus Gas Co.	Coke	2560	16 00
6	Cols. Show Case Wks.	Cases	2561	245 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
7	Cols. Cge. Hdw. Co. ...	Castings	2562	1 00
	J. P. Carlile	Sand and cement	2563	3 75
	Cols. Dispatch	Advertisement	2564	25 65
	C. Ohio Oil Co.	Oil	2565	9 79
	Cols. M. M. Supply Co..	Supplies	2566	87 31
	Cols. Supply Co.	Supplies	2567	161 16
	C. O. Paper Co.	Paper	2568	3 75
	W. J. Davidson	Feed and hauling	2569	52 98
	Champlin Ptg. Co.	Printing	2570	141 10
	Cherrington Ptg. & Eng. Co.	Stamps	2571	2 25
	Cap. City Mach. Wks. .	Supplies	2572	78 99
	Citizens' Ice and Coal Co.	Ice	2573	9 45
	Cols. Macadam Co.	Stone and lime	2574	221 50
	Engelke & Bigelow	Freight and cartage	2575	84 52
	Engelke & Bigelow	Freight and cartage	2576	112 08
	E. Doddington & Co.	Lumber	2577	224 14
	Erner & Hopkins	Supplies	2578	241 25
	Elliott's Art Gallery	Crayon	2579	19 00
6	A. G. Geren	Blue print	2580	1 00
	Engr. & Plumb. Supply Co.	Hose	2581	13 60
	Elect. Supply & Const. Co.	Elect. supplies	2582	25 61
	F. W. Freeman	Groceries	2583	14 53
	P. Hayden Saddlery Hdw Co.	Castings	2584	8 72
	Fred J. Heer	Printing	2585	26 00
	Hall-Collins Hdw. Co.	Supplies	2586	10 10
	J. C. Howard	Painting	2587	47 00
	Hann & Adair	Printing	2588	26 82
	Jeffrey Mfg. Co.	Chain and sprocket	2589	25 67
	The Kilbourne-Jones Co.	Scales	2590	6 40
	Kimball & Matthews	Supplies	2591	31 24
	Kelton & Converse	Lumber	2592	192 36
	Lutheran Book Concern	Binding	2593	68 24
	Oscar Lear	Ribbon	2594	1 75
	J. W. Meek	Repairing	2595	4 85
	W. H. Miller & Co.	Belt	2596	10 36
	Monypeny-Hammond Co.	Matches	2597	5 50
	McClelland & Co.	Supplies	2598	9 10
	McAllister, Mohler Co...	Repairs	2599	4 75
2	Alexis Cope	February salary	2600	187 50
	Carl E. Steeb	February salary	2601	83 33
7	E. J. McNamara	Fixtures	2602	160 90
	Nitschke Bros.	Printing	2603	258 57
	Ohio Furniture Co.	Couch and cabinet	2604	26 75
	J. Ohlen Sons Saw Mfg. Co.	Steel	2605	12 80
	Ohio State Journal Co..	Advertisement	2606	20 00
	Onyx Paint Store	Paint	2607	5 50
	Orr, Brown & Price	Supplies	2608	101 57
	Pure Milk Co.	Milk	2609	2 00
	F. L. Packard	Architect fees	2610	10 00
	Payne McDonald Hdw. Co.	Hardware	2611	26 64
	Ben D. Potus	Valves	2612	8 25
	James Penn	Feed hauling	2613	45 76
	Ross Chemical Co.	Soda ash	2614	22 75
	Lee Roessler	Water colors	2615	3 25

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Ruggles-Gale Co.	Supplies	2616	6 20
	F. O. Schoedinger	Lemonade shaker	2617	2 40
	A. H. Smythe	Supplies	2618	15 45
	Sheldon Dry Goods Co.	Ribbon	2619	7 20
	Harry E. Smith	Printing	2620	20 85
	The Seagrave Co.	Step ladder	2621	16 00
	E. H. Sell & Co.	Paper	2622	5 25
	Spahr & Glenn	Letter heads	2624	7 50
	Standard Oil Co.	Oil	2623	15 07
	Schoedinger, Fearn & Co	Hardware	2625	36 08
	J. W. Smiley	Straps	2626	2 25
	Tracy, Wells & Co.	Crayons	2627	4 25
	Tallmadge Hdw. Co.	Hardware	2628	77 22
	Vogelgesang Furnace Co.	Grate and labor	2629	3 30
	L. S. Wells	Subscriptions	2630	17 00
	J. G. Wallace	Exhibit of horse	2631	5 00
	Z. L. White	Canton	2632	1 25
	J. M. & W. Westwater .	Supplies	2633	7 03
	P. F. Yoerger	Painting signs	2634	9 90
	Wilbur L. Scoville, Sec.	Annual assessment	2635	3 00
	Ass. of Am. Law Schools	Annual dues	2636	10 00
	A. H. Adams	Pipe wrenches	2637	3 00
	John W. White, Prest. .	Photographic fac simile .	2638	31 50
	N. H. Anderson Co.	Books	2639	156 25
	D. H. Burrell & Co.	Supplies	2640	36 21
	Boston Book Co.	Books	2641	53 50
	Bausch & Lomb Opt. Co.	Instuments and supplies .	2642	406 84
5	Michado & Roller	Wattmeter	2643	57 38
7	Burrows Bros. Co.	Books	2644	90 10
	James G. Biddle	Instruments	2645	74 85
	Coml. Tribune Co.	Advertisement	2646	8 65
	Coml. Bulletin Co.	Advertisement	2647	7 00
	Cambridge Ento. Co.	Subscription	2648	2 00
	Cinti. Screw & Tap Co. .	Bolts and nuts	2649	5 88
	Cutter Elec. & Mfg. Co. .	Voltmeter	2650	52 56
	Creamery Package Mfg. Co.	Oil	2651	3 00
	Central Electric Co.	Supplies	2652	27 15
	Chicago Lab. S. & P. Co.	Supplies	2653	121 52
	W. Stillman Dutton	Architect fees	2654	104 83
	Denver Fire Clay Co. .	Crucibles, etc.	2655	26 34
	Dodge Mfg. Co.	Supplies	2656	22 48
	Alexander Duncker	Books	2657	143 60
	Dodd, Mead & Co.	Encyclopaedia	2658	70 00
	D. & W. Fuse Co.	Fuses	2659	2 20
	J. L. Engle	Maps	2660	7 00
	Electric Appliance Co. .	Shade	2661	6 30
	W. T. Eaton	Supplies	2662	5 90
	Elmer & Amend	Supplies	2663	393 80
	Federal Mfg. Co.	Supplies	2664	2 74
	Fostoria Inc. Lamp Co..	Lamps	2665	42 50
	Foote Mineral Co.	Rettile and calcite	2666	2 10
	J. Goebel & Co.	Crucibles	2667	29 40
	Wm. Gaertner & Co.	Supplies	2668	18 27
	Glove Rolling Mill Co. .	Angle	2669	6 48
	R. Gibson & Sons	Lambs	2670	42 00
	Gen'l App. & Chem Co..	Supplies	2671	35 57
	D. G. & J. G. Hamner .	Lamb	2672	17 00
	The Howe Scale Co.	Scales	2673	13 65
	J. L. Holcomb Mfg. Co..	Scrubs	2674	9 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	India Alkali Works	Soap	2675	27 84
	W. Horace Hoskins	Advertisement	2676	70 00
	E. H. Kellogg & Co.	Cyl. oil	2677	48 60
	Knauth, Nachod & Kuhne	Account Otto Harressowitz in Leipsig	2678	5 33
	E. A. Kinsey Co.	Steel	2679	33 77
	Murphy Iron Works ..	Stoker arms	2680	3 80
	W. H. Boughton, Mgr. .	Advertisement	2681	6 00
	E. F. Parks	Lambs	2682	40 00
	Pictorial Ptg. Co.	Labels	2683	4 58
	Riehle Bros. Test Mach. Co.	Machine	2684	215 00
	Rand, McNally Co.	Maps	2685	10 80
	M. A. Seed Dry Plate Co	Plates	2686	3 60
	E. H. Sargent & Co.	Bone ash	2687	87 92
	G. E. Stechert	Books	2688	32 91
	W. W. Carr, Dis. Clk. .	Books	2689	15 90
	Standard Chain Co. ...	Iron	2690	1 20
	Shaw-Walker Co.	Cabinet	2691	10 50
	Spencer Lens Co.	Micrometer	2692	3 00
	P. M. Sharples	Blood tester	2693	150 00
	Henry Troemner	Scales and weights	2694	9 60
	A. H. Thomas Co.	Test tubes	2695	8 50
	Toledo Linseed Oil Wks.	Oil meal	2696	78 00
	Max Woche & Son	Harness	2697	13 28
	Whitall Tatum Co.	Tubes	2698	85 32
	Whitney Mfg. Co.	Tool grinder	2699	71 10
	The Wirt Electric Co. .	Rheostats	2700	10 58
	Western Elec. Inst. Co.	Volt meter	2701	58 50
	Webb Sta. & Ptg. Co. .	Supplies	2702	13 90
	S. P. Hommon	Hauling water	2703	4 73
	Joseph Garretson	Labor	2704	15 00
9	E. C. Fast	Labor	2705	6 50
	Murray City Coal Co. .	January coal	2706	3,030 79
	Citizens' Telephone Co.	Phone rental	2707	10 10
10	George Feick	Estimate No. 5, Basement, etc., L. B.	2708	855 00
	George Feick	Estimate No. 14, Law building	2709	3,338 00
	R. M. Round, P. M.	1,000 No. 5 envelopes	2710	21 20
11	R. M. Round, P. M.	2,000 envelopes	2711	42 80
	L. W. Funk	Labor	2712	16 70
12	R. M. Rownd, P. M.	Stamps	2713	5 00
13	W. G. Hershey	Geldings	2714	550 00
14	S. C. Derby	Money advanced	2715	2 93
17	F. C. Caldwell	Money advanced	2716	9 95
19	F. B. Toothaker	Printing brief in Page will case	2717	74 20
23	J. E. Bender	Fees vet. clinic clerk	2718	41 83
28	W. O. Thompson	February salary, inst.	2719	416 67
	K. H. Duncan	February salary, inst.	2720	66 66
	Edith D. Cockins	February salary, inst.	2721	66 66
	Edith R. Hubler	February salary, inst.	2722	40 00
	Gertrude Bellows	February salary, inst.	2723	35 00
	Minnie F. Hines	February salary, inst.	2724	40 00
	Metta Seymour	February salary, inst.	2725	5 00
	Wm. C. McCracken	February salary, inst.	2726	150 00
	Wm. Standley	February salary, inst.	2727	65 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Wm. Case	February salary, inst.	2728	55 00
	Benj. LeBay	February salary, inst.	2729	55 00
	Thos. Boude	February salary, inst.	2730	50 00
	Fred Brewer	February salary, inst.	2731	50 00
	Geo. R. Rose	February salary, inst.	2732	75 00
	Earl Kimmel	February salary, inst.	2733	25 00
	Norman Slee	February salary, inst.	2734	20 00
	Charles Lewis	February salary, inst.	2735	20 00
	J. V. Cranston	February salary, inst.	2736	45 00
	C. H. Woodruff	February salary, inst.	2737	70 00
	J. P. Covan	February salary, inst.	2738	83 33
	A. F. Hall	February salary, inst.	2739	73 33
	John Ricketts	February salary, inst.	2740	45 00
	Thos. E. Osburn	February salary, inst.	2741	45 00
	James Kelley	February salary, inst.	2742	30 00
	M. S. Harvey	February salary, inst.	2743	25 00
	H. H. Hamilton	February salary, inst.	2744	12 50
	F. E. Beutler	February salary, inst.	2745	12 50
	Raymond Peirce	February salary, inst.	2746	18 00
	R. M. Martin	February salary, inst.	2747	20 00
	Chas. M. Hicks	February salary, inst.	2748	45 00
	Earl Conway	February salary, inst.	2749	25 00
	G. A. Goodspeed	February salary, inst.	2750	40 00
	Chester McClintock	February salary, inst.	2751	20 00
	John Brown	February salary, inst.	2752	15 00
	John Brown	February salary, inst.	2753	25 00
	Wm. R. Thomas	February salary, inst.	2754	40 00
	F. E. Fleischer	February salary, inst.	2755	40 00
	Wm. Whitestine	February salary, inst.	2756	40 00
	Harry Chantler	February salary, inst.	2757	40 00
	Wash Townsell	February salary, inst.	2758	20 00
	G. C. Denny	February salary, inst.	2759	40 00
	M. N. Cook	February salary, inst.	2760	40 00
	J. K. Pritner	February salary, inst.	2761	40 00
	H. M. Templin	February salary, inst.	2762	40 00
	Francis Andrix	February salary, inst.	2763	25 00
	John W. Brown	February salary, inst.	2764	40 00
	Thos. F. Hunt	February salary, inst.	2765	250 00
	J. W. Decker	February salary, inst.	2766	170 00
	C. S. Plumb	February salary, inst.	2767	200 00
	Frank Ruhlen	February salary, inst.	2768	90 00
	M. F. Miller	February salary, inst.	2769	100 00
	B. B. Herrick	February salary, inst.	2770	66 66
	D. A. Crowner	February salary, inst.	2771	66 66
	Laurel L. Hill	February salary, inst.	2772	33 33
	H. A. Weber	February salary, inst.	2773	225 00
	Alfred Vivian	February salary, inst.	2774	150 00
	Rudolph Hirsch	February salary, inst.	2775	40 00
	Geo. W. Knight	February salary, inst.	2776	250 00
	Theo. C. Smith	February salary, inst.	2777	130 00
	Geo. W. Rightmire	February salary, inst.	2778	115 00
	A. M. Bleile	February salary, inst.	2779	225 00
	C. B. Morrey	February salary, inst.	2780	140 00
	M. Dresbach	February salary, inst.	2781	80 00
	R. J. Seymour	February salary, inst.	2782	25 00
	Wm. C. Mills	February salary, inst.	2783	40 00
	Pearl Coutellier	February salary, inst.	2784	10 00
	J. N. Bradford	February salary, inst.	2785	210 00
	Thos. E. French	February salary, inst.	2786	150 00
	Thos. K. Lewis	February salary, inst.	2787	100 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Silas Martin	February salary, inst.	2788	100 00
	J. H. Vosskuehler	February salary, inst.	2789	100 00
	I. Lucian Shaw	February salary, inst.	2790	30 00
	J. S. Tidball	February salary, inst.	2791	50 00
	H. C. Lord	February salary, inst.	2792	225 00
	W. A. Kellerman	February salary, inst.	2793	225 00
	J. H. Schaffner	February salary, inst.	2794	130 00
	Jas. G. Sanders	February salary, inst.	2795	25 00
	Harriet G. Burr	February salary, inst.	2796	25 00
	O. E. Jennings	February salary, inst.	2797	50 00
	Jas. McOwen	February salary, inst.	2798	33 33
	S. A. Norton	February salary, inst.	2799	150 00
	Wm. McPherson	February salary, inst.	2800	225 00
	W. E. Henderson	February salary, inst.	2801	140 00
	C. W. Foulk	February salary, inst.	2802	120 00
	M. W. Mumma	February salary, inst.	2803	70 00
	Catherine E. Andrews..	February salary, inst.	2804	30 00
	E. N. Webb	February salary, inst.	2805	60 00
	W. F. Coover	February salary, inst.	2806	30 00
	C. E. Sherman	February salary, inst.	2807	180 00
	A. H. Heller	February salary, inst.	2808	180 00
	Allando Case	February salary, inst.	2809	60 00
	W. L. Davies	February salary, inst.	2810	60 00
	Ray M. Royer	February salary, inst.	2811	62 50
	W. A. Landacre	February salary, inst.	2812	75 00
	Edw. Orton, Jr.	February salary, inst.	2813	200 00
	A. V. Bleininger	February salary, inst.	2814	100 00
	E. Ogden	February salary, inst.	2815	20 00
	M. A. Stoner	February salary, inst.	2816	180 00
	C. P. Souther	February salary, inst.	2817	120 00
	Cora Elliott	February salary, inst.	2818	25 00
	F. C. Clark	February salary, inst.	2819	200 00
	J. E. Hagerty	February salary, inst.	2820	120 00
	Frank H. Miesse	February salary, inst.	2821	30 00
	C. C. Huntington	February salary, inst.	2822	25 00
	D. R. Major	February salary, inst.	2823	160 00
	F. C. Caldwell	February salary, inst.	2824	190 00
	F. A. Fish	February salary, inst.	2825	110 00
	H. B. Brooks	February salary, inst.	2826	30 00
	A. C. Barrows	February salary, inst.	2827	225 00
	J. R. Taylor	February salary, inst.	2828	150 00
	W. H. Siebert	February salary, inst.	2829	180 00
	E. H. McNeal	February salary, inst.	2830	100 00
	C. S. Prosser	February salary, inst.	2831	190 00
	J. A. Bownocker	February salary, inst.	2832	160 00
	E. A. Eggers	February salary, inst.	2833	225 00
	Chas. W. Mesloh	February salary, inst.	2834	160 00
	B. A. Eisenlohr	February salary, inst.	2835	80 00
	Sarah Barrows	February salary, inst.	2836	40 00
	J. R. Smith	February salary, inst.	2837	225 00
	A. W. Hodgman	February salary, inst.	2838	160 00
	W. S. Elden	February salary, inst.	2839	130 00
	W. R. Lazenby	February salary, inst.	2840	225 00
	V. H. Davis	February salary, inst.	2841	83 33
	F. E. Sanborn	February salary, inst.	2842	200 00
	W. A. Knight	February salary, inst.	2843	120 00
	W. H. Renck	February salary, inst.	2844	100 00
	O. P. Crowe	February salary, inst.	2845	100 00
	W. Morelan	February salary, inst.	2846	30 00
	S. C. Derby	February salary, inst.	2847	225 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	W. F. Hunter	February salary, inst.	2848	250 00
	J. H. Collins	February salary, inst.	2849	20 00
	J. A. Shauck	February salary, inst.	2850	100 00
	E. B. Kinkead	February salary, inst.	2851	130 00
	W. H. Page	February salary, inst.	2852	200 00
	E. O. Randall	February salary, inst.	2853	80 00
	E. D. Howard	February salary, inst.	2854	25 00
26	Olive Jones	February salary, inst.	2855	145 00
28	Harriet Townshend	February salary, inst.	2856	60 00
	Gertrude Kellicott	February salary, inst.	2857	60 00
	Maude Jeffrey	February salary, inst.	2858	60 00
	C. B. Guittard	February salary, inst.	2859	60 00
	Elizabeth Smythe	February salary, inst.	2860	40 00
	Martha Hartford	February salary, inst.	2861	40 00
	J. C. Cone	February salary, inst.	2862	30 00
	R. D. Bohannon	February salary, inst.	2863	225 00
	Geo. W. McCoard	February salary, inst.	2864	160 00
	J. E. Boyd	February salary, inst.	2865	150 00
	C. L. Arnold	February salary, inst.	2866	130 00
	E. F. Coddington	February salary, inst.	2867	90 00
	H. W. Kuhn	February salary, inst.	2868	110 00
	S. E. Rasor	February salary, inst.	2869	100 00
	W. B. Skimming	February salary, inst.	2870	30 00
	Wm. T. Magruder	February salary, inst.	2871	225 00
	E. A. Hitchcock	February salary, inst.	2872	175 00
	Horace Judd	February salary, inst.	2873	120 00
	Lloyd Yost	February salary, inst.	2874	30 00
	E. G. Bailey	February salary, inst.	2875	30 00
	N. W. Lord	February salary, inst.	2876	200 00
	E. E. Somermeier	February salary, inst.	2877	110 00
	G. O. Spitzer	February salary, inst.	2878	30 00
	Gustav Bruder	February salary, inst.	2879	20 00
	F. A. Ray	February salary, inst.	2880	200 00
	T. B. Simon	February salary, inst.	2881	30 00
	Geo. B. Kauffman	February salary, inst.	2882	200 00
	C. A. Dye	February salary, inst.	2883	110 00
	W. H. Scott	February salary, inst.	2884	225 00
	T. H. Haines	February salary, inst.	2885	130 00
	A. E. Davies	February salary, inst.	2886	90 00
	C. P. Linhart	February salary, inst.	2887	160 00
	C. M. Berryman	February salary, inst.	2888	85 00
	D. C. Huddleson	February salary, inst.	2889	80 00
	Alma H. Wacker	February salary, inst.	2890	7 50
	B. F. Thomas	February salary, inst.	2891	225 00
	A. D. Cole	February salary, inst.	2892	200 00
	F. E. Kester	February salary, inst.	2893	100 00
	L. B. Tuckerman	February salary, inst.	2894	70 00
	J. V. Denney	February salary, inst.	2895	225 00
	W. L. Graves	February salary, inst.	2896	130 00
	G. H. McKnight	February salary, inst.	2897	130 00
	G. Pennock	February salary, inst.	2898	30 00
	Clara C. Ewalt	February salary, inst.	2899	30 00
	F. J. Muirie	February salary, inst.	2900	30 00
	T. H. Dickenson	February salary, inst.	2901	110 00
	B. L. Bowen	February salary, inst.	2902	225 00
	Chas. A. Bruce	February salary, inst.	2903	150 00
	J. D. Batchelder	February salary, inst.	2904	120 00
	Herminie de Nagy	February salary, inst.	2905	30 00
	D. S. White	February salary, inst.	2906	190 00
	Paul Fischer	February salary, inst.	2907	180 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	S. Sisson	February salary, inst.	2908	160 00
	O. V. Brumley	February salary, inst.	2909	85 00
	H. W. Brown	February salary, inst.	2910	30 00
	Herbert Osborn	February salary, inst.	2911	225 00
	Jas. S. Hine	February salary, inst.	2912	120 00
	F. L. Landacre	February salary, inst.	2913	120 00
	Otto H. Swezy	February salary, inst.	2914	30 00
	Max Morse	February salary, inst.	2915	15 00
	Helen Lammdin	February salary, inst.	2916	16 00
	W. W. Boyd	February salary, inst.	2917	200 00
	Florence Price	February salary, inst.	2918	40 00
	Lily Weeks	February salary, inst.	2919	24 00
	Mildred Waters	February salary, inst.	2920	35 00
26	F. C. Clark	Petty items	2921	4 67
27	H. D. Bruning	February salary	2922	125 00
28	J. L. Stainbrook	February salary	2923	50 00
	Frances Andrix	Balance January salary ..	2924	5 00
	R. M. Round, P. M.	Stamps	2925	45 00
	R. M. Round, P. M.	Stamps	2926	17 00
Mch. 2	A. L. Harrington	73½ hrs. elec. wiring @ 25c	2927	18 38
3	Alexis Cope	March salary	2928	187 50
13	G. B. Ackerman	Laboratory work	2929	7 25
	Annie B. Ayers	Stenographer	2930	14 25
	A. Bolenbaugh	Student labor	2931	5 25
	Clara M. Berryman	Money advanced	2932	1 45
	F. E. Beutler	Student labor	2933	5 25
	Mahlon E. Barr	Student labor	2934	5 20
	E. J. Billings	Student labor	2935	13 12
	W. W. Boyd	Expenses	2936	68 70
	J. E. Bard	Dog feed	2937	2 00
	C. H. Booth	Laboratory work	2938	5 30
	H. L. Bostater	Student labor	2939	5 56
	C. P. Burkey	Student labor	2940	10 60
	Alexis Cope	Expenses	2941	16 20
	G. A. Crabb	Student labor	2942	3 53
	W. D. Chester	Student labor	2943	5 45
	Harry Cranston	Student labor	2944	4 85
	H. L. Doud	Student	2945	7 80
	Mary A. DeCamp	Labor in library	2946	7 25
	W. O. Dean	Student labor	2947	6 74
	J. E. Ensweiler	Student labor	2948	10 00
	Wm. Essig	Carpenter work	2949	50 40
	Thos. Earl	Specimens	2950	10 00
13	E. D. Easton	Laboratory work	2951	10 40
	E. C. Fast	Labor	2952	10 50
	Chas. S. Fisher	Guide work	2953	4 75
	Ida May Fisher	Library work	2954	20 25
	E. P. Fleicht	Student labor	2955	4 88
	W. D. Griggith	Campus work	2956	13 35
	John Graft	Wheeling coal	2957	46 50
	T. Harvey Haines	Money advanced	2958	2 48
	John Hoffhine	Student labor	2959	15 40
	O. P. Humphrey	Labor	2960	3 00
	S. P. Hommon	Hauling water	2961	8 78
	W. F. Hunter	Expenses	2962	14 95
	R. E. Hecker	Wiring	2963	1 12
	W. E. Hosler	Student labor	2964	10 60
	Lilian Huffman	Library work	2965	22 30
	T. W. Holloway	Student labor	2966	8 40

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	H. B. Henderson	Student labor	2967	9 80
	W. R. Judson	Drafting	2968	4 00
	H. C. Moist	Library work	2969	14 70
12	D. W. McGrath	Est. No. 5, Chem. Bldg. .	2970	950 00
13	Florence Magley	Gymnasium music	2971	27 00
	D. P. Moreton	Student labor	2972	24 23
	O. F. Metz	Student labor	2973	13 43
	E. F. Mangold	Lab. assistance	2974	25 00
	O. V. Maurer	Student labor	2975	1 20
	E. R. Minns	Guide work	2976	3 13
	C. L. Minor	Campus work	2977	1 73
	Clara G. Mark	Student labor	2978	5 25
	E. L. Orndorff	Laboratory work	2979	29 55
	Marion Peck	Student labor	2980	55 50
	Pauline Pfaff	Gym. work	2981	7 50
	C. S. Plumb	Expenses	2982	5 90
	Roy Pratt .....	.....	2983	42 00
	C. C. Poindexter	Labor	2984	2 00
	J. H. Randall	Carpenter work	2985	53 90
	C. E. Sherman	Charts	2986	3 52
	J. A. Schneider	Carpenter work	2987	44 80
	Peter Schupp	Labor	2988	8 00
	M. A. Stoner	Money advanced	2989	5 00
	R. E. Shepard	Student labor	2990	3 25
	J. A. Stiver	Guide work	2991	14 55
	O. J. B. Smith	Labor	2992	1 12
	S. Seagrave	Labor	2993	9 00
	Joseph Stewart	Labor	2994	27 00
	A. A. Straub	Labor	2995	6 35
	Carl E. Steeb	Notary work	2996	3 25
	J. L. Scott	Student labor	2997	16 54
	W. O. Thompson	Money advanced	2998	25 00
	J. R. Thomas	Student labor	2999	100 00
	A. J. Wagner	Student labor	3000	8 25
	F. Webber	Labor	3001	13 25
	S. P. Ward	Student labor	3002	7 86
	Am. Sewer Pipe Co.	Fire clay	3003	3 96
	Abbott & Co.	Hardware	3004	5 52
	Acme Paving Co.	Cement	3005	3 75
	Blackwood-Green Co.	Stack	3006	3 90
	Beck & Orr	Files	3007	1 25
	Bucher Eng. & Mfg. Co. .	Etchings	3008	1 80
	H. Braun, Sons & Co. .	Chem. supplies	3009	60 84
	Bowden Towel Supply Co.	Towels	3010	55 46
	Berlin Ptg. Co.	Printing	3011	99 40
	Wm. Burdell, Jr.	Harness supplies	3012	11 55
	Co's. Transfer Co.	Hauling	3013	3 00
	Cols. Photo Supply	Plates	3014	1 04
	Cols. Carpet Cleaning Works	Cleaning carpets	3015	36 45
	Capital City Mantel Co.	Resetting mantel	3016	7 00
	Citizens' Ice & Coal Co. .	Coupon book	3017	7 00
	Citizens' Publ. Co.	Advertising	3018	9 00
	Cols. Tent & Awning Co	Curtains	3019	1 50
	E. A. Cole & Co.	Coal	3020	424 89
	C. O. Paper Co.	Farchment	3021	1 25
	Cols. Macadam Co.	Lime	3022	50 59
	Geo. D. Cross Lumber Co	Lumber	3023	31 63

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Cols. Heating & Ventilating Co.	Repairs	3024	3 00
	The H. Cole Co.	Supplies	3025	6 40
	Cap. City Mach. Wks.	Supplies	3026	49 02
	Cols. Supply Co.	Supplies	3027	124 44
	Champlin Printing Co.	Printing	3028	175 25
	W. J. Davidson	Feed	3029	33 71
	Dunn, Taft & Co.	Dry goods	3030	7 50
	Engelke & Bigelow	Freight and cartage	3031	30 22
	Elect. Supply Const. Co.	Elect. supplies	3032	9 39
	The Erner-Hopkins Co.	Elect. supplies	3033	78 84
	Fitzpatrick & Hoepfner	Heating	3034	275 00
	F. W. Freeman	Groceries	3035	26 55
	L. M. Ferguson	Rugs	3036	16 60
	M. D. Griffin	Carpenter work	3037	15 00
	Goodman Bros.	Repairing clock	3038	1 50
	J. J. Gheen	Plastering	3039	4 80
	Fred J. Heer	Printing	3040	220 00
	J. C. Howard	Painting	3041	101 00
	Chas. B. Hood	Soap polish	3042	7 50
	Hann & Adair	Printing	3043	7 40
	Hanna Pt. Mfg. Co.	Bronze oil	3044	5 70
	Harrington & Nonnemacher	Repairing tuner	3045	75
	W. F. Janeway	Gal cause	3046	5 55
	Kelton & Converse	Lumber	3047	280 00
	Andrew Kerins	Ovens	3048	34 00
	S. T. Knight	Second payment moving house	3049	200 00
	Oscar S. Lear	Stencil and ink	3050	5 75
	M. C. Lilley Co.	Feet letters	3051	4 65
	Jeffrey Mfg. Co.	Supplies	3053	17 32
	Philip Long	Board lunches	3052	8 50
	S. D. McDonald	Gasolene	3054	3 07
	Murray City Coal Co.	Coal	3055	2,491 30
	McClelland & Co.	Supplies	3056	2 28
	E. J. McNamara	Curtains and brackets	3057	11 00
	Nitschke Bros.	Printing	3058	19 95
	Ohio Furn & Mantel Co.	Furniture	3059	65 75
	Orr, Brown & Price	Drugs, etc.	3060	41 47
	Payne, McDonald Co.	Hardware	3061	22 74
	Chas. J. Palmer	Repairing	3062	75 80
	Pure Milk Co.	Milk tickets	3063	2 00
	Pletsch & Sutton	Fish, etc.	3064	8 84
	James Penn	Feed, etc.	3065	57 35
	Ross Chem. Co.	Soda ash	3066	45 50
	Andrew Spittal	Laboratory work	3067	21 00
	Schoedinger, Fearn Co.	Hardware	3068	20 41
	Spahr & Glenn	Printing	3069	76 75
	Standard Oil Co.	Engine oil	3070	9 00
	Tingley Bros.	Feed	3071	63 80
	Tracy, Wells & Co.	Supplies	3072	21 08
	Tallmadge Hdw. Co.	Hardware	3073	222 08
	Taylor, William & Co.	Coal	3074	173 89
	Z. L. White & Co.	Felt cloth	3075	10 61
	J. M. Westwater	Supplies	3076	7 48
	W. H. Anderson & Co.	Report, etc.	3077	485 00
	E. M. Berlin	Book	3078	1 10
	J. & H. Berge	Bone ash	3079	4 00
	The Bee Publ. Co.	Advertising	3080	8 25

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	E. Bartholomew	Copy	3081	6 00
	The F. Bissell Co.	Globes	3082	4 67
	Babcock & Wilcox Co. .	Supplies	3083	9 35
	The Burnap Co.	Supplies	3084	3 05
	Bemis & Call, H. & T. Co.	Thumb nuts and screws ..	3085	1 68
	Thos. Beechman & Co. .	Carbo wheel	3086	16 54
	Easton Testing Labora- tories	Metallographist	3087	3 00
	M. Bradley & Co.	Supplies	3088	5 48
	D. H. Burrell & Co.	Supplies	3089	23 02
	Burrows Bros. Co.	Books	3090	132 77
	Crosby Steam Gage Valve Co.	Repairing	3091	13 50
	Cleve. Twist Drill Co. .	Supplies	3092	3 98
	Wm. Coles	Freight	3093	2 95
	Central Elect. Co.	Supplies	3094	10 50
	Creamery Pkg. & Mfg. Co	Hoop	3095	1 95
	Crucible Steel Co.	Steel	3096	146 44
	W. T. Eaton Mfg. Co. .	Bushing	3097	50
	J. L. Engle	Maps	3098	18 85
	Engr. News Publ. Co. .	Book	3099	2 00
	Engr. & Mining Journal.	.....	3100	11 05
	The Engineering Record	Advertising	3101	14 04
	D. M. Ferry & Co.	Seeds	3102	38 02
	Finished Steel Co.	Steel	3103	3 96
	M. E. S. Field	Account Concilio Biblio- graphio	3104	16 78
	Garlock Packing Co. ...	Packing	3105	11 50
	General Electric Co. ...	Supplies	3106	5 05
	Emil Greiner	Jars	3107	2 50
	J. L. Holcomb Mfg. Co. .	Brushes	3108	72 80
	The Hunnewell Soap Co.	Powdered soap	3109	18 90
	Houghton, Mifflin & Co.	Books	3110	25 00
	Bruno Hessling	Books	3111	7 50
	Indiana Engineering So- ciety	Proceedings	3112	1 33
	C. A. Koehler & Co. ...	Books	3113	7 25
	The Leatheroid Mfg. Co.	Washers	3114	3 00
	Library Bureau	Supplies	3115	27 62
	J. P. Morgan Publication Fund	1-8 payment on reports....	3116	12 50
	T. S. & J. D. Negus	Chronometer	3117	95 00
	The E. L. Powers Co. ...	Subscriptions	3118	6 00
	F. E. Reed Co.	Shaft	3119	13 00
	Sound Currency	Subscription	3120	1 00
	"The Key" K. T. T.	Adv.	3121	25 00
	Stillwell - Bierce Smith- Vaile Co.	Valves	3122	3 00
	Geo. R. Swain	Lantern slides	3123	23 36
	The Smith-Lee Co.	Caps	3124	26 00
	Standard Oil Co.	Flue dust	3125	1 75
	G. E. Stechert	Books and periodicals	3126	1,086 80
	The Toledo Blade Co. .	Advertising	3127	9 00
	H. Troemner	Scales and weights	3128	9 40
	Archer H. Thomas Co. .	Supplies	3129	40 96
	The Thatcher Mfg. Co. .	Color	3130	57 00
	Univ. of Chicago Press.	Printing	3131	7 90
	Whitall Gatum Co.	Supplies	3132	28 61
	The Wool Duster Co. ...	Dusters	3133	8 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
14	C. U. Telephone Co.	Phone rentals	3134	31 00
16	John T. Mack	Expenses as trustee	3135	16 45
18	Hart & Crouse Co.	Labor	3136	60
	Columbus Gas Co.	February gas	3137	189 68
19	D. A. Crowner	Salary, March, 1903	3138	66 67
	Arthur Stultz	Labor	3139	6 75
20	B. B. Herrick	March salary	3140	66 67
28	W. O. Thompson	March salary, inst.	3141	416 67
	K. H. Duncan	March salary, inst.	3142	66 66
	E. D. Cockins	March salary, inst.	3143	66 66
	E. R. Hubler	March salary, inst.	3144	40 00
	Carl E. Steeb	March salary, inst.	3145	83 33
	Gertrude Bellows	March salary, inst.	3146	35 00
	M. F. Hines	March salary, inst.	3147	40 00
	Metta Seymour	March salary, inst.	3148	5 00
	Wm. C. McCracken	March salary, inst.	3149	150 00
	Wm. Standley	March salary, inst.	3150	65 00
28	Wm. Case	March salary, inst.	3151	55 00
	Benj. LeBay	March salary, inst.	3152	55 00
	Thos. Boude	March salary, inst.	3153	50 00
	Fred Brewer	March salary, inst.	3154	50 00
	J. L. Stainbrook	March salary, inst.	3155	50 00
	Geo. R. Rose	March salary, inst.	3156	75 00
	Earl Kimmel	March salary, inst.	3157	25 00
	Norman Slee	March salary, inst.	3158	20 00
	Chas. Lewis	March salary, inst.	3159	20 00
	J. V. Cranston	March salary, inst.	3160	45 00
	C. H. Woodruff	March salary, inst.	3161	70 00
	J. P. Covan	March salary, inst.	3162	83 33
	A. F. Hall	March salary, inst.	3163	73 33
	Allando Case	March salary, inst.	3164	60 00
	John Ricketts	March salary, inst.	3165	45 00
	Thos. E. Osburn	March salary, inst.	3166	45 00
	James Kelley	March salary, inst.	3167	30 00
	M. S. Harvey	March salary, inst.	3168	25 00
	H. H. Hamilton	March salary, inst.	3169	12 50
	F. E. Beutler	March salary, inst.	3170	12 50
	Raymond Pierce	March salary, inst.	3171	18 00
	R. M. Martin	March salary, inst.	3172	20 00
	Chas. M. Hicks	March salary, inst.	3173	45 00
	Earl Conway	March salary, inst.	3174	25 00
	G. A. Goodspeed	March salary, inst.	3175	40 00
	Chester McClintock	March salary, inst.	3176	20 00
	Wm. R. Thomas	March salary, inst.	3177	40 00
	John Brown	March salary, inst.	3178	25 00
	John Brown	March salary, inst.	3179	15 00
	Wm. Whitestone	March salary, inst.	3180	40 00
	Harry Chantler	March salary, inst.	3181	40 00
	W. Townsell	March salary, inst.	3182	20 00
	G. C. Denney	March salary, inst.	3183	40 00
	M. N. Cook	March salary, inst.	3184	40 00
	J. K. Pritner	March salary, inst.	3185	40 00
	H. M. Templin	March salary, inst.	3186	40 00
	Frances Andrix	March salary, inst.	3187	30 00
	John W. Brown	March salary, inst.	3188	40 00
	Thos. F. Hunt	March salary, inst.	3189	250 00
	John W. Decker	March salary, inst.	3190	170 00
	Chas. S. Plumb	March salary, inst.	3191	200 00
	Frank Ruhlen	March salary, inst.	3192	90 00
	M. F. Miller	March salary, inst.	3193	100 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Laurel L. Hill	March salary, inst.	3194	33 33
	H. A. Weber	March salary, inst.	3195	225 00
	Alfred Vivian	March salary, inst.	3196	150 00
	Rudolph Hirsch	March salary, inst.	3197	40 00
	Geo. W. Knight	March salary, inst.	3198	250 00
	Theo. C. Smith	March salary, inst.	3199	130 00
	Geo. W. Rightmire	March salary, inst.	3200	115 00
26	J. V. Denny	March salary, inst.	3201	225 00
	A. M. Bleile	March salary, inst.	3202	225 00
	C. B. Morrey	March salary, inst.	3203	140 00
	M. Dresbach	March salary, inst.	3204	80 00
	R. J. Seymour	March salary, inst.	3205	25 00
	Pearl Contellier	March salary, inst.	3206	10 00
	W. C. Mills	March salary, inst.	3207	40 00
	Jos. N. Bradford	March salary, inst.	3208	210 00
	Thos. E. French	March salary, inst.	3209	150 00
	Thos. K. Lewis	March salary, inst.	3210	100 00
	S. Martin	March salary, inst.	3211	100 00
	J. H. Voskuehler	March and part Feb. salary	3212	140 00
	Lucian Shaw	March salary, inst.	3213	30 00
	J. S. Tidball	March salary, inst.	3214	50 00
	H. C. Lord	March salary, inst.	3215	225 00
	W. A. Kellerman	March salary, inst.	3216	225 00
	J. H. Schaffner	March salary, inst.	3217	130 00
	J. G. Sanders	March salary, inst.	3218	25 00
	Harriet Burr	March salary, inst.	3219	25 00
	O. E. Jennings	March salary, inst.	3220	50 00
	Jas. McOwen	March salary, inst.	3221	33 33
	S. A. Norton	March salary, inst.	3222	125 00
	Wm. McPherson	March salary, inst.	3223	225 00
	W. E. Henderson	March salary, inst.	3224	140 00
	C. W. Foulk	March salary, inst.	3225	120 00
	J. W. Mumma	March salary, inst.	3226	70 00
	Catherine E. Andrews ..	March salary, inst.	3227	30 00
	E. N. Webb	March salary, inst.	3228	60 00
	W. F. Coover	March salary, inst.	3229	30 00
	C. E. Sherman	March salary, inst.	3230	180 00
	A. H. Heller	March salary, inst.	3231	180 00
	Frank H. Eno	March salary, inst.	3232	150 00
	W. L. Davies	March salary, inst.	3233	60 00
	H. D. Browning	March salary, inst.	3234	125 00
	W. A. Landacre	March salary, inst.	3235	75 00
	Ray M. Royer	March salary, inst.	3236	62 50
	Edw. Orton, Jr.	March salary, inst.	3237	200 00
	A. V. Bleiningner	March salary, inst.	3238	100 00
	E. Ogden	March salary, inst.	3239	20 00
	M. A. Stoner	March salary, inst.	3240	180 00
	C. P. Souther	March salary, inst.	3241	120 00
	Corra Elliott	March salary, inst.	3242	25 00
	F. C. Clark	March salary, inst.	3243	200 00
	J. E. Haggerty	March salary, inst.	3244	120 00
	F. H. Miesse	March salary, inst.	3245	30 00
	C. C. Huntington	March salary, inst.	3246	25 00
	D. R. Major	March salary, inst.	3247	160 00
	F. C. Caldwell	March salary, inst.	3248	190 00
	F. A. Fish	March salary, inst.	3249	110 00
	H. B. Brooks	March salary, inst.	3250	30 00
28	A. C. Barrows	March salary, inst.	3251	225 00
	J. R. Taylor	March salary, inst.	3252	150 00
	W. H. Siebert	March salary, inst.	3253	180 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	E. H. McNeal	March salary, inst.	3254	100 00
	Chas. S. Prosser	March salary, inst.	3255	190 00
	J. A. Bownocker	March salary, inst.	3256	160 00
	E. A. Eggers	March salary, inst.	3257	225 00
	C. W. Mesloh	March salary, inst.	3258	160 00
	B. A. Eisenlohr	March salary, inst.	3259	80 00
	Sarah Barrows	March salary, inst.	3260	40 00
	J. R. Smith	March salary, inst.	3261	225 00
	A. W. Hodgman	March salary, inst.	3262	160 00
	W. S. Elden	March salary, inst.	3263	130 00
	W. R. Lazenby	March salary, inst.	3264	225 00
	V. H. Davis	March salary, inst.	3265	83 33
	F. E. Sanborn	March salary, inst.	3266	200 00
	W. A. Knight	March salary, inst.	3267	120 00
	W. H. Renck	March salary, inst.	3268	100 00
	C. P. Crowe	March salary, inst.	3269	100 00
	W. Morelan	March salary, inst.	3270	30 00
	S. C. Derby	March salary, inst.	3271	225 00
	W. F. Hunter	March salary, inst.	3272	250 00
	J. H. Collins	March salary, inst.	3273	20 00
	J. A. Shauck	March salary, inst.	3274	100 00
	E. B. Kinkead	March salary, inst.	3275	130 00
	W. H. Page	March salary, inst.	3276	200 00
	E. O. Randall	March salary, inst.	3277	80 00
	E. D. Howard	March salary, inst.	3278	25 00
	Olive Jones	March salary, inst.	3279	145 00
	Harriet Townshend	March salary, inst.	3280	60 00
	Gertrude Kellicott	March salary, inst.	3281	60 00
	Maude Jeffrey	March salary, inst.	3282	60 00
	C. B. Guittard	March salary, inst.	3283	60 00
	Elizabeth Smythe	March salary, inst.	3284	40 00
	Martha Hartford	March salary, inst.	3285	40 00
	J. C. Cone	March salary, inst.	3286	30 00
	R. D. Bohannan	March salary, inst.	3287	225 00
	Geo. W. McCoard	March salary, inst.	3288	160 00
	James E. Boyd	March salary, inst.	3289	150 00
	C. L. Arnold	March salary, inst.	3290	130 00
	E. F. Coddington	March salary, inst.	3291	90 00
	H. W. Kuhn	March salary, inst.	3292	110 00
	S. E. Rasor	March salary, inst.	3293	100 00
	W. B. Skimming	March salary, inst.	3294	30 00
	Wm. T. Magruder	March salary, inst.	3295	225 00
	E. A. Hitchcock	March salary, inst.	3296	175 00
	Horace Judd	March salary, inst.	3297	120 00
	Lloyd Yost	March salary, inst.	3298	30 00
	E. G. Bailey	March salary, inst.	3299	30 00
	N. W. Lord	March salary, inst.	3300	200 00
	E. E. Somermeier	March salary, inst.	3301	110 00
	G. O. Spittler	March salary, inst.	3302	30 00
	Gustav Bruder	March salary, inst.	3303	20 00
	F. A. Ray	March salary, inst.	3304	200 00
	T. B. Simon	March salary, inst.	3305	30 00
	Geo. B. Kauffman	March salary, inst.	3306	200 00
	C. A. Dye	March salary, inst.	3307	110 00
	W. H. Scott	March salary, inst.	3308	225 00
	T. H. Haines	March salary, inst.	3309	130 00
	A. E. Davies	March salary, inst.	3310	90 00
	C. P. Linhart	March salary, inst.	3311	160 00
	C. M. Berryman	March salary, inst.	3312	85 00
	D. C. Huddleson	March salary, inst.	3313	80 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1903	Alma H. Wacker	March salary, inst.	3314	7 50
	B. F. Thomas	March salary, inst.	3315	225 00
	A. D. Cole	March salary, inst.	3316	200 00
	F. E. Kester	March salary, inst.	3317	100 00
	L. B. Tuckerman, Jr.	March salary, inst.	3318	70 00
	W. L. Graves	March salary, inst.	3319	130 00
	G. H. McKnight	March salary, inst.	3320	130 00
	Gilbert Pennock	March salary, inst.	3324	30 00
	Clara Ewalt	March salary, inst.	3322	30 00
	F. J. Muirle	March salary, inst.	3323	30 00
	T. H. Dickenson	March salary, inst.	3324	110 00
	B. L. Bowen	March salary, inst.	3325	225 00
	Chas. A. Bruce	March salary, inst.	3326	150 00
	J. D. Batchelder	March salary, inst.	3327	120 00
	Hermine de Nagy	March salary, inst.	3328	30 00
	D. S. White	March salary, inst.	3329	190 00
	Paul Fischer	March salary, inst.	3330	180 00
	S. Sisson	March salary, inst.	3331	160 00
	O. V. Brumley	March salary, inst.	3332	85 00
	H. W. Brown	March salary, inst.	3333	30 00
	Herbert Osborn	March salary, inst.	3334	225 00
	J. S. Hine	March salary, inst.	3335	120 00
	F. L. Landacre	March salary, inst.	3336	120 00
	Otto H. Swezy	March salary, inst.	3337	30 00
	Max Morse	March salary, inst.	3338	15 00
	Helen Lambdin	March salary, inst.	3339	16 00
	W. W. Boyd	March salary, inst.	3340	200 00
	Florence Price	March salary, inst.	3341	40 00
	Lily Weeks	March salary, inst.	3342	26 00
	Mildred Waters	March salary, inst.	3343	35 00
	F. E. Fleischer	March salary, inst.	3344	40 00
	B. F. Maag	March salary, inst.	3345	112 50
April 1	Geo. Hyslop	Student labor	3346	1 31
3	Annie B. Ayers	Typewriting	3347	11 32
	O. C. Alleshouse	Student labor	3348	2 12
1	C. C. Wilcox	Battalion clerk	3349	7 50
	C. D. Shoemaker	Pattalion clerk	3350	7 50
1	George Feick	Estimate No. 15, Law Bldg.	3351	5,627 87
	George Feick	Estimate No. 3, extra found- dations	3352	532 26
	George Feick	Estimate No. 6, Basement Law bldg.	3353	557 65
2	D. W. McGrath	Estimate No. 1, Eng. Bldg.	3354	2,850 00
	D. W. McGrath	Estimate No. 6, Chem. Bldg.	3355	1,140 00
	R. M. Rownd, P. M.	Envelopes	3356	10 60
3	H. B. Brooks	Student labor	3357	8 00
	E. J. Billings	Student labor	3358	14 87
	F. E. Beutler	Wiring	3359	4 50
	C. P. Burkey	Student labor	3360	14 60
	C. A. Bickham	Student labor	3361	87
	H. L. Bostater	Student labor	3362	7 55
	John Bender	Anatomy horses, etc.	3363	20 36
	J. E. Bard	Student labor	3364	10 16
	W. D. Chester	Student labor	3365	1 35
2	Alexis Cope	Expenses to Sandusky	3366	13 20
3	M. Dresbach	Supplies	3367	6 31
	H. L. Doud	Student labor	3368	7 50
	Sam'l C. Derby	Books	3369	15 00
	W. O. Dean	Student labor	3370	6 52
	J. E. Emswiler	Student labor	3371	5 25

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Wm. Fields	Labor	3372	23 97
	E. R. Feicht	Student labor	3373	6 08
	Charles F. Forster	Labor	3374	2 75
	E. C. Fast	Student labor	3375	5 12
	Chas. S. Fisher	Student labor	3376	6 38
	W. D. Griffith	Campus work	3377	24 20
	John Graft	Labor	3378	46 50
	H. A. Gehres	Student labor	3379	5 38
	S. P. Hommon	Hauling water	3380	9 83
	T. W. Holloway	Student labor	3381	4 80
	W. E. Hosler	Labor	3382	12 15
	C. P. Hoover	Student labor	3383	1 25
	John M. Harsh	Student labor	3384	1 35
	F. R. Kunkle	Student labor	3385	15 25
	W. R. Judson	Student labor	3385	1 30
	J. S. Knox	Labor	3387	1 00
	T. K. Lewis	Lantern slides	3388	11 55
	The Lantern	Advertising	3389	58 34
	E. R. Minns	Guide service	3390	2 75
	G. G. Moler	Student labor	3391	11 25
	Wm. T. Magruder	Subscription	3392	1 50
	W. C. Mills	Labor	3393	4 75
	O. F. Metz	Student labor	3394	10 16
	O. F. Meriam	Student labor	3395	94
	Marion Peck	Labor	3396	60 45
	Roy Pratt	Labor	3397	46 50
	J. H. Randall	Carpenter work	3398	8 40
	W. H. Redhead	Labor	3399	3 35
	G. L. Shipps	Student labor	3400	2 12
3	J. A. Stiver	Guide service	3401	14 70
	O. J. B. Smith	Student labor	3402	2 88
	J. R. Smith	Express	3403	50
	M. A. Stoner	Money advanced	3404	5 00
	A. L. Stewart	Student labor	3405	10 00
	H. E. Smith	Campus work	3406	1 25
	T. B. Simons	Money advanced	3407	9 80
	J. L. Scott	Student labor	3408	5 77
	A. A. Straub	Student labor	3409	4 05
	John A. Schneider	Carpenter work	3410	39 20
	B. O. Stengle	Student labor	3411	2 12
	W. O. Thompson	Expenses to Dayton	3412	6 60
	Earl Thomas	Student labor	3413	10 50
	F. M. Webber	Student labor	3414	12 75
	A. J. Wagner	Student labor	3415	10 35
	J. A. Wilkinson	Student labor	3416	8 75
	H. D. Weber	Labor	3417	26 85
	Carl E. Steeb	Notary work	3418	5 50
	J. N. Bradford	Architect fees	3419	500 00
2	M. B. Lamb	Assistance	3420	100 00
3	Lawrence Maxwell	Att'y fees, Page will case	3421	5,063 13
	American Bridge Co.	Angles and iron	3422	21 06
	Andrews & Barnes	Belt, etc.	3423	35 40
	Bucher Eng. & Mfg Co.	Cuts	3424	2 33
	Blackwood, Green & Co.	Hardware	3425	3 62
	Bowden Towel Supply Co.	Towel service	3426	53 44
	H. Braun Sons & Co.	Supplies	3427	219 61
	Berlin Printing Co.	Printing	3428	16 87
	J. P. Carlile	Plaster	3429	2 50
	C. O. Paper Co.	Paper	3430	1 50

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	The H. Cole Co.	Linen paper	3431	2 50
	Citizens' Ice & Coal Co.	Ice coupon book	3432	8 00
	Cols. Show Case Works.	Cases	3433	518 00
	Cols. Sporting Goods Co.	Apparatus	3434	29 10
	Cols. Photo Supply Co.	Supplies	3435	16 80
	Geo. D. Cross Lumber Co.	Lumber	3436	19 90
	Columbus Dispatch	Advertising	3437	9 25
	Cols. Heating & Vent Co.	Repairs	3438	3 18
	Cols. Mdse. Co.	Mdse.	3439	8 75
	Cols. M. & M. Supply Co.	Supplies	3440	21 27
	Cott's Quick Printing House	Printing	3441	6 75
	Capital City Machine Works	Supplies	3442	30 78
	Cols. Supply Co.	Supplies	3443	12 43
	Champlin Printing Co. ....	.....	3444	25 00
	E. Doddington & Co. ....	.....	3445	60 00
	Electric Supply Const. Co.	Supplies	3446	4 63
	Erner-Hopkins Co.	Supplies	3447	10 94
	Flint & Walling Co.	Repairs	3448	1 95
	F. W. Freeman	Groceries	3449	17 81
	Griswold-Sohl Co.	Steel	3450	4 60
	Fred J. Heer	Printing	3451	14 50
	Kauffman-Lattimer Co.	Supplies	3452	166 15
	Kelton & Converse	Lumber	3453	16 06
	Lynden Market	Meats	3454	2 14
	Oscar Lear	Neostyle	3455	22 70
	McAllister, Mohler & Co.	Furniture, etc.	3456	107 87
	F. C. Clark	Subscription	3457	3 03
	J. S. McLean	Table, etc.	3458	320 25
	McClelland & Co.	Paper, etc.	3459	2 76
	W. H. Miller Co.	Valve discs	3460	1 73
	Nitschke Bros.	Printing	3461	25 49
	Orr, Brown & Price	Supplies	3462	30 68
	Pletsch & Sutton	Fish, etc.	3463	2 55
	James Penn	Feed, etc.	3464	90 74
	Ruggles, Gale Co.	Letter book	3465	1 25
	Reynolds Bros.	Floats, etc.	3466	6 55
	Ross Chemical Co.	Alkalai	3467	22 75
	Standard Oil Co.	Oil	3468	19 33
	Seraphim Blank Book Co.	Binding	3469	93 75
	Schoedinger, Fearn & Co.	Hardware	3470	83 55
	F. O. Schoedinger	Ring, etc.	3471	5 40
	Harry E. Smith	Cards	3472	4 00
	Tallmadge Hdwe. Co.	Hardware	3473	3 65
	Tracy, Wells & Co.	Supplies	3474	14 16
	L. G. White	Battery	3475	20 00
	J. M. & W. Westwater ..	Supplies	3476	3 90
	Am. Vulc. Fibre Co.	Red fibre	3477	75
	Am. Arithmometer Co.	Paper	3478	4 50
	W. H. Anderson Co.	Books	3479	27 50
	The Brief	Advertisement	3480	10 00
	Milton Bradley Co.	Supplies	3481	6 71
	Burrows Brothers Co.	Books	3482	231 43
	Baker & Adamson Chem Co.	Supplies	3483	4 20
	J. Bishop & Co.	Crucibles	3484	5 76
	Bausch & Lomb Opt. Co.	Supplies	3485	31 37

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Geo. Clarke, Treas.	Book	3486	20 00
	Central Elect. Co.	Cleats	3487	2 83
	Denver Fire Clay Co.	Muffles	3488	6 00
	Engr. News Publ. Co.	Advertising	3489	7 80
	Engineer Co.	Advertising	3490	7 90
	Enterprise Mfg. Co.	Collars	3491	1 33
	Eberbach & Son	Speed reducer	3492	15 00
	Elmer & Abend	Gas apparatus	3493	2 00
	Garlock Packing Co.	Packing	3494	21 19
	Ginn & Co.	Book	3495	2 00
	The B. F. Goodrich Co.	Tubing	3496	1 46
	Emil Greiner	Jars	3497	5 41
	A. J. Grout	Book	3498	4 00
	Houghton-Mifflin Co.	Book	3499	4 00
	Edw. Jones	Expenses	3500	13 51
	Leader Ptg. Co.	Advertising	3501	9 50
	Iea Brothers & Co.	Books	3502	8 25
	Library Bureau	Cards	3503	6 00
	Michigan Chemical Co.	Alcohol	3504	93 70
	Narragansett Machine Co.	Supplies	3505	11 20
	N. Y. Botanical Garden.	Books	3506	5 43
	Nat. Assn. State Universities	Annual dues 1902-1903	3507	10 00
	Riehle Bros. Machine Co.	Supplies	3508	4 00
	Smithsonian Institute ..	Catalog	3509	13 45
	E. H. Sargent & Co. ....	.....	3510	38 00
	E. S. Squibb & Sons	Supplies	3511	35 73
	Standard Chain Co.	Iron	3512	1 16
	G. E. Sechert	Books	3513	216 34
	Arthur Thomas & Co.	Supplies	3514	22 50
	Univ. of State of New York	Supplies	3515	2 67
	H. C. White & Co.	Stenograph	3516	4 00
	Webb Sta. & Ptg. Co.	Supplies	3517	36 00
	Weston Elec. Inst. Co.	Anemeter	3518	13 50
	J. R. Smith	Book	3519	5 00
4	Frances Andrix	Balance Jan. salary	3520	5 00
6	Alexis Cope	April salary	3521	187 50
10	A. C. Barrows	Dept. supplies	3522	4 40
13	Columbus Gas Co.	March gas	3523	201 00
	C. U. Telephone Co.	Phone rentals	3524	11 00
14	Citizens' Telephone Co.	Phone rentals	3525	130 50
16	R. M. Round, P. M.	Postage deposit	3526	25 00
17	David S. White	Expenses	3527	38 00
18	Earl Thomas	Wheeling coal	3528	21 00
	S. S. Royster	Sand	3529	8 00
	J. T. Mack	Expenses trustee	3530	19 20
25	W. O. Thompson	April salary, inst.	3531	416 67
	K. N. Duncan	April salary, inst.	3532	66 66
	C. E. Steeb	April salary, inst.	3533	83 33
	E. D. Cockins	April salary, inst.	3534	66 66
	E. R. Hubler	April salary, inst.	3535	40 00
	G. Bellows	April salary, inst.	3536	35 00
	M. F. Hines	April salary, inst.	3537	40 00
	M. Seymour	April salary, inst.	3538	5 00
	W. C. McCracken	April salary, inst.	3539	150 00
	W. Standley	April salary, inst.	3540	65 00
	W. Case	April salary, inst.	3541	55 00
	B. LeBay	April salary, inst.	3542	55 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	T. Bonde	April salary, inst.	3543	50 00
	F. Brewer	April salary, inst.	3544	50 00
	J. L. Stainbrook	April salary, inst.	3545	50 00
	G. R. Rose	April salary, inst.	3546	75 00
	E. Kimmel	April salary, inst.	3547	25 00
	N. Slee	April salary, inst.	3548	20 00
	C. Lewis	April salary, inst.	3549	20 00
	J. V. Cranston	April salary, inst.	3550	45 00
21	A. D. Cole	April salary, inst.	3551	200 00
25	C. H. Woodruff	April salary, inst.	3552	70 00
	J. P. Covan	April salary, inst.	3553	83 33
	A. F. Hall	April salary, inst.	3554	73 33
	A. Case	April salary, inst.	3555	60 00
	J. Ricketts	April salary, inst.	3556	45 00
	T. E. Osborn	April salary, inst.	3557	45 00
	J. Kelley	April salary, inst.	3558	30 00
	M. S. Harvey	April salary, inst.	3559	25 00
	H. H. Hamilton	April salary, inst.	3560	12 50
	F. E. Beutler	April salary, inst.	3561	12 50
	R. Pierce	April salary, inst.	3562	18 00
	R. M. Martin	April salary, inst.	3563	20 00
	C. M. Hicks	April salary, inst.	3564	45 00
	E. Conway	April salary, inst.	3565	25 00
	G. A. Goodspeed	April salary, inst.	3566	40 00
	C. McClintock	April salary, inst.	3567	20 00
	J. Brown	April salary, inst.	3568	25 00
	J. Brown	April salary, inst.	3569	15 00
	W. R. Thomas	April salary, inst.	3570	40 00
	F. E. Fleischer	April salary, inst.	3571	40 00
	Wm. Whitestone	April salary, inst.	3572	40 00
	H. Chantler	April salary, inst.	3573	40 00
	W. Townsel	April salary, inst.	3574	20 00
	G. C. Denny	April salary, inst.	3575	40 00
	M. W. Cook	April salary, inst.	3576	40 00
	J. K. Pritner	April salary, inst.	3577	40 00
	H. M. Tenplin	April salary, inst.	3578	40 00
	F. Andrix	April salary, inst.	3579	30 00
	J. W. Brown	April salary, inst.	3580	40 00
	T. F. Hunt	April salary, inst.	3581	250 00
	C. S. Plumb	April salary, inst.	3582	200 00
	F. Ruhlen	April salary, inst.	3583	90 00
	M. F. Miller	April salary, inst.	3584	100 00
	J. W. Decker	April salary, inst.	3585	170 00
	L. L. Hill	April salary, inst.	3586	33 33
	H. A. Weber	April salary, inst.	3587	225 00
	A. Vivian	April salary, inst.	3588	150 00
	R. Hirsch	April salary, inst.	3589	40 00
	G. W. Knight	April salary, inst.	3590	250 00
	G. W. Rightmire	April salary, inst.	3591	115 00
	A. M. Bleile	April salary, inst.	3592	225 00
	C. B. Morrey	April salary, inst.	3593	140 00
	M. Dresbach	April salary, inst.	3594	80 00
	R. J. Seymour	April salary, inst.	3595	25 00
	W. C. Mills	April salary, inst.	3596	40 00
	P. Coutellier	April salary, inst.	3597	10 00
	J. N. Bradford	April salary, inst.	3598	210 00
	T. E. French	April salary, inst.	3599	150 00
	T. K. Lewis	April salary, inst.	3600	100 00
25	S. Martin	April salary, inst.	3601	100 00
	J. H. Vosskuehler	April salary, inst.	3602	120 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	L. Shaw	April salary, inst.	3603	30 00
	H. C. Lord	April salary, inst.	3604	225 00
	W. A. Kellerman	April salary, inst.	3605	225 00
	J. H. Schaeffner	April salary, inst.	3606	130 00
	J. G. Sanders	April salary, inst.	3607	25 00
	H. G. Burr	April salary, inst.	3608	25 00
	O. E. Jennings	April salary, inst.	3609	50 00
	J. McOwen	April salary, inst.	3610	33 33
	A. A. Norton	April salary, inst.	3611	125 00
	W. McPherson	April salary, inst.	3612	225 00
	W. E. Henderson	April salary, inst.	3613	140 00
	C. W. Foulk	April salary, inst.	3614	120 00
	M. W. Mamma	April salary, inst.	3615	70 00
	C. E. Andrews	April salary, inst.	3616	30 00
	E. N. Webb	April salary, inst.	3617	60 00
	W. F. Coover	April salary, inst.	3618	30 00
	C. E. Sherman	April salary, inst.	3619	180 00
	A. H. Heller	April salary, inst.	3620	180 00
	F. H. Eno	April salary, inst.	3621	150 00
	W. L. Davies	April salary, inst.	3622	60 00
	H. D. Brunning	April salary, inst.	3623	125 00
	R. M. Royer	April salary, inst.	3624	62 50
	W. A. Landacre	April salary, inst.	3625	75 00
	E. Orton, Jr.	April salary, inst.	3626	200 00
	A. V. Bleninger	April salary, inst.	3627	100 00
	E. Ogden	April salary, inst.	3628	20 00
	M. A. Stoner	April salary, inst.	3629	180 00
	C. P. Souther	April salary, inst.	3630	120 00
	C. Elliott	April salary, inst.	3631	25 00
	F. C. Clark	April salary, inst.	3632	200 00
	J. E. Hagerty	April salary, inst.	3633	120 00
	F. H. Miesse	April salary, inst.	3634	30 00
	C. C. Huntington	April salary, inst.	3635	25 00
	D. R. Major	April salary, inst.	3636	160 00
	F. C. Caldwell	April salary, inst.	3637	190 00
	F. A. Fish	April salary, inst.	3638	110 00
	H. B. Brooks	April salary, inst.	3639	30 00
	A. C. Barrows	April salary, inst.	3640	225 00
	J. R. Taylor	April salary, inst.	3641	150 00
	W. H. Siebert	April salary, inst.	3642	180 00
	E. H. McNeal	April salary, inst.	3643	100 00
	C. P. Prosser	April salary, inst.	3644	180 00
	J. A. Bownocker	April salary, inst.	3645	160 00
	C. W. Mesloh	April salary, inst.	3646	160 00
	B. A. Eisenlohr	April salary, inst.	3647	80 00
	S. Barrows	April salary, inst.	3648	40 00
	J. R. Smith	April salary, inst.	3649	225 00
	A. W. Hodgman	April salary, inst.	3650	160 00
	W. S. Elden	April salary, inst.	3651	130 00
	W. R. Lazenby	April salary, inst.	3652	225 00
	W. H. Davis	April salary, inst.	3653	83 33
	F. E. Sanborn	April salary, inst.	3654	200 00
	W. A. Knight	April salary, inst.	3655	120 00
	W. H. Renck	April salary, inst.	3656	100 00
	C. R. Crowe	April salary, inst.	3657	100 00
	W. Morelan	April salary, inst.	3658	30 00
	S. C. Derby	April salary, inst.	3659	225 00
	W. F. Hunter	April salary, inst.	3660	250 00
	J. H. Collins	April salary, inst.	3661	20 00
	J. A. Shauck	April salary, inst.	3662	100 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	E. B. Kinkead	April salary, inst.	3663	130 00
	W. H. Page	April salary, inst.	3664	200 00
	E. O. Randall	April salary, inst.	3665	80 00
	E. D. Howard	April salary, inst.	3666	25 00
	O. Jones	April salary, inst.	3667	145 00
	H. Townshend	April salary, inst.	3668	60 00
	G. Kellicott	April salary, inst.	3669	60 00
	M. Jeffrey	April salary, inst.	3670	60 00
	C. B. Guittard	April salary, inst.	3671	60 00
	E. Smythe	April salary, inst.	3672	40 00
	M. Hartford	April salary, inst.	3673	40 00
	J. C. Cone	April salary, inst.	3674	30 00
	R. D. Bohannon	April salary, inst.	3675	225 00
	G. W. McCoard	April salary, inst.	3676	160 00
	J. E. Boyd	April salary, inst.	3677	150 00
	C. L. Arnold	April salary, inst.	3678	130 00
	E. F. Coddington	April salary, inst.	3679	90 00
	H. W. Kuhn	April salary, inst.	3680	110 00
	S. E. Rasor	April salary, inst.	3681	100 00
	W. B. Skimming	April salary, inst.	3682	30 00
	W. T. Magruder	April salary, inst.	3683	225 00
	E. A. Hitchcock	April salary, inst.	3684	175 00
	H. Judd	April salary, inst.	3685	120 00
	L. Yost	April salary, inst.	3686	30 00
	E. G. Bailey	April salary, inst.	3687	30 00
	N. W. Lord	April salary, inst.	3688	200 00
	E. E. Sommermeirer	April salary, inst.	3689	110 00
	G. O. Spittler	April salary, inst.	3690	30 00
	G. Bruder	April salary, inst.	3691	20 00
	F. A. Ray	April salary, inst.	3692	200 00
	T. B. Simon	April salary, inst.	3693	30 00
	G. B. Kauffman	April salary, inst.	3694	200 00
	C. A. Dye	April salary, inst.	3695	110 00
	W. H. Scott	April salary, inst.	3696	225 00
	T. H. Haines	April salary, inst.	3697	130 00
	A. E. Davies	April salary, inst.	3698	90 00
	C. P. Linhart	April salary, inst.	3699	160 00
	C. M. Berryman	April salary, inst.	3700	85 00
	D. C. Huddleson	April salary, inst.	3701	80 00
	A. H. Wacker	April salary, inst.	3702	7 50
	B. F. Thomas	April salary, inst.	3703	225 00
	F. E. Kester	April salary, inst.	3704	100 00
	L. B. Tuckerman, Jr. ..	April salary, inst.	3705	70 00
	J. V. Denney	April salary, inst.	3706	225 00
	W. L. Graves	April salary, inst.	3707	130 00
	G. H. McKnight	April salary, inst.	3708	130 00
	G. Pennock	April salary, inst.	3709	30 00
	C. Ewalt	April salary, inst.	3710	30 00
	F. J. Muirie	April salary, inst.	3711	30 00
	T. H. Dickenson	April salary, inst.	3712	110 00
	B. L. Bowen	April salary, inst.	3713	225 00
	C. A. Bruce	April salary, inst.	3714	150 00
	H. DeNagy	April salary, inst.	3715	30 00
	D. S. White	April salary, inst.	3716	190 00
	S. Sisson	April salary, inst.	3717	160 00
	O. V. Brumley	April salary, inst.	3718	85 00
	H. W. Brown	April salary, inst.	3719	30 00
	H. Osborn	April salary, inst.	3720	225 00
	J. S. Hine	April salary, inst.	3721	120 00
	F. L. Landacre	April salary, inst.	3722	120 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	O. H. Swezey	April salary, inst.	3723	30 00
	Max Morse	April salary, inst.	3724	15 00
	J. H. Rietz	April salary, inst.	3725	20 00
	A. Rowe	April salary, inst.	3726	40 00
	H. Lambdin	April salary, inst.	3727	16 00
	J. McL. Phillips.....	April salary, inst.	3728	125 00
	W. W. Boyd	April salary, inst.	3729	200 00
	F. Price	April salary, inst.	3730	40 00
	L. Weeks	April salary, inst.	3731	26 00
	M. Waters	April salary, inst.	3732	35 00
	J. D. Batchelder	April salary, inst.	3733	120 00
	A. B. Probert	April salary, inst.	3734	84 00
	T. C. Smith	April salary, inst.	3735	130 00
	B. F. Maag	April salary, inst.	3736	112 50
	E. Odgen	Fees and store room cards	3737	25 50
	F. C. Clark	Supplies	3738	1 85
	Cols. Water Wks.	Water rates to April 1st..	3739	1,478 13
	J. E. Creighton	Lecture	3740	15 00
	W. Brown	Salary as janitor	3741	40 00
	W. W. Boyd	Expenses	3742	94 35
	W. W. Boyd	Money advanced	3743	6 00
	Industrial Water Co....	Water softening machine ..	3744	2,184 79
May 4	Alexis Cope	May salary	3745	187 50
5	J. Westwater & Co.	Estimates No. 4, Vet. Bldg.	3746	7,362 50
	D. W. McGrath	Estimates No. 2, Eng. Bldg.	3747	9,215 00
	H. R. Powell	Clerical Powell	3748	5 90
6	W. S. Dutton	Architect fees	3749	181 25
	M. F. Hill	Labor	3750	5 50
6	J. E. Bender	Fees Clerk Vet. Clinic	3751	39 96
7	A. B. Ayers	Typewriting	3752	4 80
	G. B. Ackerman	Laboratory work	3753	8 77
	W. W. Boyd	Expenses	3754	86 80
	F. E. Beutler	Student labor	3755	6 00
	J. E. Bender	Supplies	3756	6 00
	C. M. Beem	Campus work	3757	26 10
	R. H. Barrick	Campus work	3758	30 95
	G. Burrell	Campus work	3759	3 75
	J. E. Bard	Campus work	3760	5 05
	E. J. Billings	Student labor	3761	2 75
	E. Baldwin	Music	3762	7 00
	C. P. Burkey	Student labor	3763	11 25
	C. H. Booth	Laboratory assistance	3764	7 80
	H. L. Bostater	Student labor	3765	8 73
	A. C. Barrows	Money advanced	3766	17 70
	H. Cranston	Student labor	3767	3 07
	E. E. Dawson	Student labor	3768	1 87
	J. V. Denney	Expenses	3769	38 70
	E. Duncan	Clerical work	3770	6 30
	M. A. DeCamp	Library work	3771	16 06
	H. L. Doud	Library work	3772	8 45
	V. H. Davis	Larrow	3773	10 00
	W. Essig	Carpenter work	3774	28 00
	G. Eagleson	Clerical work	3775	8 10
	J. E. Emswiler	Correcting problems	3776	4 00
	E. D. Easton	Laboratory work	3777	18 20
	W. Fields	Labor	3778	61 07
	J. A. Frederick	Campus work	3779	4 68
	I. Fischer	Library work	3780	25 31
	C. F. Forster	Student labor	3781	11 85
	C. E. Fast .....	.....	3782	87

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	L. W. Funk	Student Labor	3783	54 00
	C. S. Fischer	Student labor	3784	10 00
	W. D. Griffith	Student labor	3785	57 90
	J. Graft	Labor	3786	42 75
	H. A. Gehres	Student labor	3787	15 53
	T. Houser	Student labor	3788	10 04
	D. L. Hurst	Student labor	3789	20 00
	S. Hummon	Student labor	3790	1 25
	H. I. Hadsell	Campus work	3791	3 93
	P. I. Hamilton	Campus work	3792	1 62
	R. E. Hecker	Wiring	3793	3 32
	W. E. Hosler	Labor	3794	11 50
	L. Huffman	Library work	3795	20 81
	E. Harrington	Library work	3796	11 38
	H. B. Henderson	Lab. assistance	3797	3 80
	J. Hoffaine	Lab. assistance	3798	12 35
	C. P. Hoover	Labor	3799	2 62
	W. G. Jenkins	Student labor	3800	3 53
7	W. C. McCracken	Expenses	3801	16 70
	G. G. Moler	Campus work	3802	26 62
	C. L. Minor	Campus work	3803	1 25
	C. Miller	Clerical work	3804	2 30
	W. T. Magruder	Book	3805	1 05
	D. P. Moreton	Labor	3806	19 58
	O. F. Metz	Student labor	3807	16 89
	C. G. Mark	Student labor	3808	20 00
	W. D. Neave	Campus work	3809	1 25
	T. E. Osborn	Repairs lantern	3810	1 35
	R. Pratt	Student labor	3811	45 00
	M. Peck	Labor	3812	56 10
	C. C. Poindexter	Labor	3813	5 38
	S. J. Rigdon	Campus work	3814	5 75
	J. Robinson	Campus work	3815	5 75
	J. A. Schneider	Campus work	3816	46 20
	H. E. Smith	Labor	3817	5 25
	J. A. Stiver	Guide work	3818	20 40
	P. Schuppe	Student labor	3819	5 00
	L. Shaw	Tracing plans	3820	5 00
	E. Thomas	Labor	3821	1 50
	B. H. Tyrrell	Labor	3822	3 37
	J. R. Thomas	Campus work	3823	4 00
	J. D. Thrower	Labor	3824	1 25
	H. P. Weber	Labor	3825	86 97
	D. R. Walker	Labor	3826	1 25
	F. M. Webber	Correcting problems	3828	7 00
	A. P. Ward .....	.....	3827	7 75
	A. J. Wagner	Student labor	3829	11 70
	J. A. Wilkinson	Lab. assistance	3830	3 20
	Am. Dist. Tel. Co.	Rent boxes	3831	227 00
	Artura Photo Paper Co.	Paper	3832	6 57
	C. D. Ashcroft	Badges	3833	25 00
	S. Butler & Co.	Soap	3834	9 00
	Blackwood, Green & Co.	Roofing	3835	5 13
	Berlin Ptg. Co.	Printing	3836	391 85
	H. Braun Sons & Co. ...	Supplies	3837	57 77
	Bucher Eng. & Mfg. Co..	Cuts	3838	46 49
	C. Ohio Oil Co.	Oil	3839	9 27
	Bowden Towel Supply Co.	Towel service	3840	38 56
	Cols. Gas Co.	Coke	3841	38 48

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Cols. Hdw. Co.	Hardware	3842	5 00
	Cols. Mdse. Co.	Labels	3843	3 00
	Cols. M. & M. Supply Co.	Pipe ,etc.	3844	12 75
	Cols. Macadam Co.	Lime	3845	15 43
	Cols. Wire & Iron Wks.	Guards	3846	20 00
	Cols. Brass Co.	Goose necks	3847	6 50
	Cross Lumber Co.	Lumber	3848	26 83
	Cap. City Mach Works..	Supplies	3849	10 02
	Cols. Supply Co.	Supplies	3850	15 59
7	Central Ohio Paper Co..	Paper	3851	3 44
	Cols. Photo Supply Co..	Photo supplies	3852	19 24
	Champlin Ptg. Co.	Printing	3853	346 50
	Dunn, Taft & Co.	Cheese cloth	3854	3 29
	Engelke & Bigelow	Freight cartage	3855	58 12
	Engelke & Bigelow	Freight cartage	3856	29 52
	Erner & Hopkins	Elect. supplies	3857	24 74
	New Franklin Ptg. Co..	Printing	3858	2 25
	F. W. Freeman	Groceries	3859	26 07
	Green, Joyce & Co.	Satteen	3860	4 30
	Hanna Paint Mfg. Co..	White lead	3861	7 00
	Hann & Adair	Printing	3862	2 40
	N. C. Hager	Groceries	3863	1 10
	Hatton Pharmacy	Drugs, etc.	3864	26 25
	F. J. Herr	Printing	3865	225 40
	Jeffrey Mfg. Co.	Repairs	3866	3 20
	Krauss, Eutler & Ben- ham	Furnishings	3867	264 94
	Kimball & Mathews ...	Photo supplies	3868	121 96
	Kelton & Converse	Lumber	3869	36 32
	Kauffman, Lattimer Co..	Drugs, etc.	3870	60 12
	McAllister, Mohler & Co.	Stoves	3871	15 60
	McDonald & Steube	Shinon	3872	2 75
	McClelland & Co.	Supplies	3873	11 38
	Nitschke Bros.	Printing	3874	215 53
	Orr, Brown & Price	Supplies	3875	41 61
	Ohio Valley Press	Book	3876	5 00
	T. J. O'Neil	Sacks	3877	3 00
	Ohio Furniture Co.	Desk	3878	17 00
	Penna Fuel Co.	Coal	3879	34 80
	Ross Chemical Co.	Alkali	3880	22 75
	Schroth & Potter	Shades	3881	9 50
	A. Spittal	Labor	3882	15 66
	C. J. Siebert	Repairing	3883	20 50
	Sutton Bros.	Potatoes	3884	18 75
	H. E. Smith	Printing	3885	4 25
	Shepard & Co.	Cards	3886	2 50
	Standard Oil Co.	Oil	3887	5 75
	Sparks, Seward Co.	Fire clay	3888	4 00
	Schoedinger, Fearn & Co	Hardware	3889	23 05
	Spahr & Glenn	Printing	3890	26 75
	Tallmadge Hardware Co.	Hardware	3891	13 30
	Wagner Typewriter Co..	Supplies	3892	5 50
	P. F. Yoerger	Lettering	3893	2 50
	M. & M. Nat. Bank	Payment of judgment of said Bank vs. O. S. U..	3894	7,066 05
	Am. Aristotype Co.	Photo supplies	3895	13 70
	W. H. Anderson & Co..	Books	3896	11 50
	Am. Arch & Bldg. News Co.	Books	3897	41 25

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Baker & Adamson Chem. Co.	Supplies	3898	17 72
	J. G. Biddle	Supplies	3899	132 23
	Boston Book Co.	Books	3900	99 23
	R. R. Bowker	Books	3901	6 50
	Bausch & Lomb Opt. Co.	Supplies	3902	16 44
	Burrows Bros. Co.	Books	3903	106 81
	Chicago Lab. Supply Co.	Supplies	3904	9 70
	C. H. Evans & Co.	Advertising	3905	5 00
	Finished Steel Co.	Steel	3906	3 99
	Gabriel & Schall	Bayta	3907	2 00
	W. S. Houghton	Books	3908	15 00
	India Alkali Wks.	Savogran, etc.	3909	1 25
	W. G. Johnston Co.	Holder	3910	1 25
	E. H. Kellog Co.	Oils	3911	49 50
	Library Bureau	Supplies	3912	32 40
	T. Mehan & Sons.	Supplies	3913	52 73
	Merck & Co.	Chemicals	3914	78
	The MacMillan Co.	Book	3915	75
	Mosaic Tile Co.	Tile	3916	8 25
	Shaw-Walker Co.	Cabinets, etc.	3917	26 62
	Syracuse Chilled Plow Co.	Plow	3918	12 77
	A. A. Eater	Supplies	3919	3 05
	G. E. Stechert	Books	3920	89 44
	A. H. Thomas Co.	Supplies	3921	27 75
	H. Troemner	Hanger	3922	1 00
	G. Tiemann Co.	Dynamometer	3923	10 20
	E. Thompson Co.	Books	3924	6 00
	Torrey Botanical Club ..	Index	3925	9 43
	University Press	Printing	3926	6 50
	D. Williams Co.	Advertising	3927	11 25
	Weston Elect. Inst. Co.	Apparatus	3928	387 00
	Webb Sta. & Ptg. Co.	Supplies	3929	10 75
	F. W. Prentiss, Treas. ..	Ac. Troughton & Simms, London	3930	1,411 54
	J. S. Moses, Rec.	Va Mil land record	3931	1 00
9	R. M. Rownd, P. M.	Envelopes	3932	42 80
	W. U. Tele. Co.	Telegrams	3933	6 18
	Westinghouse E. & M. Co	Balance due on generators	3934	1,348 00
	Cols. Gas Co.	Gas	3935	209 48
	Murray City Coal Co.	Coal	3936	4,137 95
12	E. A. Cole Co.	Coal	3937	198 08
	Taylor, Williams Co.	Coal	3938	90 30
13	W. C. Dabe	Va Mil land record	3939	2 00
	N. G. Cover	Va Mil land record	3940	10 00
16	C. P. Linhart	Money advanced	3941	4 11
	W. D. Guilbert, Aud. of State	C. N. Brown scholarship fund	3942	1,000 00
	W. A. Yeagle	Carting water	3943	11 85
	W. O. Thompson	May salary	3944	416 67
20	R. M. Round, P. M.	Stamps	3945	140 00
	R. M. Round, P. M.	Two thousand No. 8 stamped envelopes	3946	43 60
	C. Englehard	Account W. C. Heraeus	3947	17 00
	R. M. Rownd, P. M.	Postage deposit	3948	50 00
	T. J. Godfrey	Expenses	3949	35 55
	H. C. Lord	Money advanced	3950	2 00
28	E. R. Hubler	May salary, inst.	3951	40 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	K. H. Duncan	May salary, inst.	3952	66 66
	E. D. Cockins	May salary, inst.	3953	66 66
	G. Bellows	May salary, inst.	3954	35 00
	M. F. Hines	May salary, inst.	3955	40 00
	C. E. Steeb	May salary, inst.	3956	83 33
	M. Seymour	May salary, inst.	3957	5 00
	W. C. McCracken	May salary, inst.	3958	150 00
	W. Standley	May salary, inst.	3959	65 00
	W. Case	May salary, inst.	3960	55 00
	G. LeBay	May salary, inst.	3961	55 00
	T. Boude	May salary, inst.	3962	50 00
	F. Brewer	May salary, inst.	3963	50 00
	J. L. Stainbrook	May salary, inst.	3964	50 00
	G. R. Rose	May salary, inst.	3965	75 00
	E. Kimmel	May salary, inst.	3966	25 00
	N. Slee	May salary, inst.	3967	20 00
	C. Lewis	May salary, inst.	3968	20 00
	J. V. Cranston	May salary, inst.	3969	45 00
	C. H. Woodruff	May salary, inst.	3970	70 00
	J. P. Covan	May salary, inst.	3971	83 33
	A. F. Hall	May salary, inst.	3972	73 33
	A. Case	May salary, inst.	3973	60 00
	J. Ricketts	May salary, inst.	3974	45 00
	T. E. Osburn	May salary, inst.	3975	45 00
	J. Kelley	May salary, inst.	3976	30 00
	M. S. Harvey	May salary, inst.	3977	25 00
	H. H. Hamilton	May salary, inst.	3978	12 50
	F. E. Beutler	May salary, inst.	3979	12 50
	R. Pierce	May salary, inst.	3980	18 00
	R. M. Martin	May salary, inst.	3981	20 00
	C. M. Hicks	May salary, inst.	3982	45 00
	E. Conway	May salary, inst.	3983	25 00
	G. A. Goodspeed	May salary, inst.	3984	40 00
	C. McClintock	May salary, inst.	3985	20 00
	J. Brown	May salary, inst.	3986	25 00
	John Brown	May salary, inst.	3987	15 00
	W. R. Thomas	May salary, inst.	3988	40 00
	F. E. Fleischer	May salary, inst.	3989	40 00
	W. Whitestein	May salary, inst.	3990	40 00
	H. Chantler	May salary, inst.	3991	40 00
	W. Townsend	May salary, inst.	3992	20 00
	G. C. Denny	May salary, inst.	3993	40 00
	M. N. Cook	May salary, inst.	3994	40 00
	J. K. Pritner	May salary, inst.	3995	40 00
	H. M. Templin	May salary, inst.	3996	40 00
	F. Andrix	May salary, inst.	3997	30 00
	J. W. Brown	May salary, inst.	3998	40 00
	T. F. Hunt	May salary, inst.	3999	250 00
	J. W. Decker	May salary, inst.	4000	170 00
	C. S. Plumb	May salary, inst.	4001	200 00
	F. Ruhlen	May salary, inst.	4002	90 00
	M. F. Miller	May salary, inst.	4003	100 00
	L. L. Hill	May salary, inst.	4004	33 33
	H. A. Weber	May salary, inst.	4005	225 00
	A. Vivian	May salary, inst.	4006	150 00
	R. Hirsch	May salary, inst.	4007	40 00
	G. W. Knight	May salary, inst.	4008	250 00
	T. C. Smith	May salary, inst.	4009	130 00
	A. M. Bleile	May salary, inst.	4011	225 00
	G. W. Rightmire	May salary, inst.	4010	115 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	C. B. Morrey	May salary, inst.	4012	140 00
	M. Dresbach	May salary, inst.	4013	80 00
	R. J. Seymour	May salary, inst.	4014	25 00
	W. C. Mills	May salary, inst.	4015	40 00
	J. N. Bradford	May salary, inst.	4016	10 00
	P. Coutellier	May salary, inst.	4017	210 00
	T. E. French	May salary, inst.	4018	150 00
	T. K. Lewis	May salary, inst.	4019	100 00
	S. Martin	May salary, inst.	4020	100 00
	J. V. Vossknebler	May salary, inst.	4021	120 00
	L. Shaw	May salary, inst.	4022	30 00
	H. C. Lord	May salary, inst.	4023	225 00
	B. F. Maag	May salary, inst.	4024	112 50
	W. A. Kellerman	May salary, inst.	4025	225 00
	J. H. Schaffner	May salary, inst.	4026	130 00
	J. G. Sanders	May salary, inst.	4027	25 00
	H. G. Burr	May salary, inst.	4028	25 00
	O. E. Jennings	May salary, inst.	4029	50 00
	J. M. Owen, Jr.	May salary, inst.	4030	33 33
	S. A. Norton	May salary, inst.	4031	125 00
	W. McPherson	May salary, inst.	4032	225 00
	W. E. Henderson	May salary, inst.	4033	140 00
	C. W. Foulk	May salary, inst.	4034	120 00
	W. M. Mumma	May salary, inst.	4035	70 00
	C. E. Andrews	May salary, inst.	4036	30 00
	E. N. Webb	May salary, inst.	4037	60 00
	W. F. Coover	May salary, inst.	4038	30 00
	C. E. Sherman	May salary, inst.	4039	180 00
	A. H. Heller	May salary, inst.	4040	180 00
	F. H. Eno	May salary, inst.	4041	150 00
	W. L. Davies	May salary, inst.	4042	60 00
	H. D. Brunning	May salary, inst.	4043	125 00
	R. M. Royer	May salary, inst.	4044	62 50
	W. A. Landacre	May salary, inst.	4045	75 00
	E. Orton, Jr.	May salary, inst.	4046	200 00
	A. V. Bleininger	May salary, inst.	4047	100 00
	E. Ogden	May salary, inst.	4048	20 00
	M. A. Stoner	May salary, inst.	4049	180 00
	C. P. Souther	May salary, inst.	4050	120 00
	C. Elliott	May salary, inst.	4051	25 00
	F. C. Clark	May salary, inst.	4052	200 00
	J. E. Hagerty	May salary, inst.	4053	120 00
	F. H. Miese	May salary, inst.	4054	30 00
	S. C. Huntington	May salary, inst.	4055	25 00
	D. R. Major	May salary, inst.	4056	160 00
	F. C. Caldwell	May salary, inst.	4057	190 00
	F. A. Fish	May salary, inst.	4058	110 00
	H. B. Brook	May salary, inst.	4059	30 00
	A. C. Barrows	May salary, inst.	4060	225 00
	J. R. Taylor	May salary, inst.	4061	150 00
	W. H. Siebert	May salary, inst.	4062	180 00
	E. H. McNeal	May salary, inst.	4063	100 00
	C. S. Prosser	May salary, inst.	4064	200 00
	J. A. Bownocker	May salary, inst.	4065	160 00
	C. W. Mesloh	May salary, inst.	4066	160 00
	C. P. Linhart	May salary, inst.	4067	160 00
	B. A. Eienlohr	May salary, inst.	4068	80 00
	S. Barrows	May salary, inst.	4069	40 00
	J. E. Smith	May salary, inst.	4070	225 00
	A. W. Hodgman	May salary, inst.	4071	160 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	W. S. Elden	May salary, inst.	4072	130 00
	W. R. Lazenby	May salary, inst.	4073	225 00
	V. H. Davis	May salary, inst.	4074	83 33
	F. E. Sanborn	May salary, inst.	4075	200 00
	W. A. Knight	May salary, inst.	4076	120 00
	W. H. Renck	May salary, inst.	4077	100 00
	C. P. Crowe	May salary, inst.	4078	100 00
	W. Morelan	May salary, inst.	4079	30 00
	S. C. Derby	May salary, inst.	4080	225 00
	W. F. Hunter	May salary, inst.	4081	250 00
	J. H. Collins	May salary, inst.	4082	20 00
	J. A. Shauck	May salary, inst.	4083	160 00
	W. H. Page	May salary, inst.	4085	130 00
	E. B. Kinkhead	May salary, inst.	4084	200 00
	E. O. Randall	May salary, inst.	4086	80 00
	O. Jones	May salary, inst.	4087	145 00
	H. Townsænd	May salary, inst.	4088	60 00
	G. Kellicott	May salary, inst.	4089	60 00
	M. Jeffrey	May salary, inst.	4090	60 00
	C. B. Guittard	May salary, inst.	4091	60 00
	E. Smythe	May salary, inst.	4092	40 00
	M. Hartford	May salary, inst.	4093	40 00
	J. C. Cone	May salary, inst.	4094	30 00
	R. D. Bohannon	May salary, inst.	4095	225 00
	G. W. McCoard	May salary, inst.	4096	160 00
	J. E. Boyd	May salary, inst.	4097	150 00
	C. L. Arnold	May salary, inst.	4098	130 00
	E. F. Coddington	May salary, inst.	4099	90 00
	H. W. Kuhn	May salary, inst.	4100	110 00
	S. E. Razor	May salary, inst.	4101	100 00
	W. B. Skimming	May salary, inst.	4102	30 00
	M. T. Magruder	May salary, inst.	4103	225 00
	E. A. Hitchcock	May salary, inst.	4104	175 00
	H. Judd	May salary, inst.	4105	120 00
	L. Yost	May salary, inst.	4106	30 00
	E. G. Bailey	May salary, inst.	4107	30 00
	N. W. Lord	May salary, inst.	4108	200 00
	E. E. Somermeier	May salary, inst.	4109	110 00
	G. O. Spittler	May salary, inst.	4110	30 00
	G. Bruder	May salary, inst.	4111	20 00
	F. A. Ray	May salary, inst.	4112	200 00
	T. B. Simons	May salary, inst.	4113	30 00
	G. B. Kauffman	May salary, inst.	4114	200 00
	C. A. Dye	May salary, inst.	4115	110 00
	W. H. Scott	May salary, inst.	4116	225 00
	T. H. Haines	May salary, inst.	4117	130 00
	A. E. Davies	May salary, inst.	4118	90 00
	C. M. Berryman	May salary, inst.	4119	85 00
	D. C. Huddleson	May salary, inst.	4120	80 00
	A. H. Wacker	May salary, inst.	4121	7 50
	B. F. Thomas	May salary, inst.	4122	225 00
	A. D. Cole	May salary, inst.	4123	200 00
	F. E. Kester	May salary, inst.	4124	100 00
	L. B. Luckerman, Jr. .	May salary, inst.	4125	70 00
	J. V. Denney	May salary, inst.	4126	225 00
	W. L. Graves	May salary, inst.	4127	130 00
	G. H. McKnight	May salary, inst.	4129	30 00
	G. Pennock	May salary, inst.	4128	130 00
	C. E. Ewalt	May salary, inst.	4129	30 00
	F. J. Muirle	May salary, inst.	4130	30 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	T. H. Dickenson	May salary, inst.	4132	110 00
	B. L. Bowen	May salary, inst.	4133	225 00
	C. A. Bruce	May salary, inst.	4134	150 00
	J. D. Batchelder	May salary, inst.	4135	120 00
	H. DeNagy	May salary, inst.	4136	30 00
	D. S. White	May salary, inst.	4137	190 00
	S. Sisson	May salary, inst.	4138	160 00
	O. V. Brumley	May salary, inst.	4139	85 00
	H. W. Brown	May salary, inst.	4140	30 00
	H. Osborn	May salary, inst.	4141	225 00
	J. S. Hine	May salary, inst.	4142	120 00
	F. L. Landacre	May salary, inst.	4143	120 00
	O. H. Swezey	May salary, inst.	4144	30 00
	M. Morse	May salary, inst.	4145	15 00
	J. H. Rietz	May salary, inst.	4146	20 00
	A. Rowe	May salary, inst.	4147	40 00
	A. Lambdin	May salary, inst.	4148	16 00
	W. W. Boyd	May salary, inst.	4149	200 00
	F. Price	May salary, inst.	4150	40 00
	L. Weeks	May salary, inst.	4151	27 00
	M. Waters	May salary, inst.	4152	35 00
	N. W. Evans	Asst. of Scioto county ..	4153	10 00
	A. B. Probert	Night watch	4154	4 50
	F. C. Caldwell	Petty items	4155	9 86
	A. C. Schott	Service on board	4156	19 00
	Hayden-Clinton National Bank	6 mo. interest \$30,000, \$110,000 4½ bonds	4157	3,375 00
	Ohio National Bank ..	6 mo. int. \$90,000 4½ bonds ..	4158	2,025 00
	F. W. Prentiss, Treas. .	Int. due at U. S. Mort. & Trust Co.	4159	562 50
June 1	Hayden-Clinton National Bank	Bonds due this date	4160	10,000 00
2	F. L. Keiser	Service in band	4161	18 00
3	G. W. Mallon	Expenses	4162	7 80
4	D. W. McGrath	Estimates No. 3, Eng. Bldg. ..	4163	10,070 00
4	D. W. McGrath	Fst. No. 5, Chem. Bldg.	4164	760 00
	G. B. Ackerman	Lab. assistance	4165	4 80
	E. J. Billings	Student labor	4166	3 12
	C. M. Beem	Student labor	4167	18 75
	C. H. Booth	Student labor	4168	7 60
5	J. A. Bownocker	Books	4169	14 60
	Citz. Tele. Co.	Phone rental	4170	2 25
	C. P. Burkey	Labor	4171	10 65
	G. Bruder	Musician	4172	2 00
	O. V. Brumley	Supplies	4173	8 90
	W. W. Boyd	Supplies	4174	89 90
	J. E. Bard	Labor	4175	4 13
	H. L. Bostater	Labor	4176	6 00
	A. Cope	Expenses to Cleve	4177	14 00
	O. Cartiell	Labor	4178	17 18
	H. Cranston	Labor	4179	2 55
	J. V. Denney	Expenses	4180	14 00
	W. O. Dean	Labor	4181	4 75
	E. D. Easton	Lab. assistance	4182	12 80
	J. A. Frederick	Labor	4183	3 75
	F. E. Fleischer	Labor	4184	2 00
	L. W. Funk	Labor	4185	13 60
	C. A. Fischer	Labor	4186	9 75
	W. D. Griffith	Labor	4187	54 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	F. S. Green	Labor	4188	62 65
	J. Graft	Labor	4189	43 50
	H. A. Gehres	Labor	4191	4 65
	A. L. Geren .....	.....	4190	1 22
	W. E. Hosler	Labor	4192	12 25
	D. L. Hurst	Labor	4193	28 62
	C. A. Hummon	Campus work	4194	1 25
	J. Hoffhine	Labor	4195	7 30
	M. F. Hill	Labor	4196	5 00
	H. L. Hadsell	Labor	4197	14 56
	F. R. Kunkle	Labor	4199	9 75
	O. Jones	Money advanced	4198	16 50
	T. K. Lewis .....	.....	4200	9 50
5	J. C. Miron	Labor	4201	14 62
	C. G. Mark	Labor	4202	15 75
	R. Pratt	Music	4204	16 75
	F. Magley	Labor	4203	13 60
	H. Prunner .....	.....	4205	1 37
	G. G. Moler	Labor	4206	20 40
	W. T. Magruder	Supplies	4207	2 44
	O. F. Metz	Labor	4208	10 28
	D. P. Moreton	Labor	4209	8 18
	M. Peck	Labor	4210	57 18
	W. L. Roller	Labor	4211	2 50
	J. Robinson	Campus work	4212	2 25
	J. O. Schneider	Labor	4213	22 40
	J. A. Stiver	Labor	4214	13 20
	W. H. Scott	Expenses	4215	5 01
	H. E. Smith	Labor	4216	6 50
	B. O. Stengle	Labor	4217	1 12
	J. L. Scott	Labor	4218	2 47
	A. A. Straub	Labor	4219	1 56
	C. E. Sherman	Money advanced	4220	7 95
	E. Thomas	Labor	4221	19 20
	H. G. Weinland	Labor	4222	22 70
	H. P. Weber	Labor	4223	37 97
	J. Wilkinson	Labor	4224	4 60
	F. M. Weber	Labor	4225	8 00
	A. J. Wagner	Labor	4226	6 30
	S. P. Ward	Labor	4227	5 30
	E. Hortman	Service in band	4228	18 00
	J. N. Bradford	Architect fees	4229	1,100 00
	D. S. White	Money advanced	4230	3 55
	Andrus Scofield & Co. .	Sacks	4231	2 00
	F. W. Atcherson	Hacks	4232	10 00
	Am. Machine Co.	Ribbons	4233	1 50
	Artura Photo Paper Co	Supplies	4234	19 79
	J. S. Abbott & Co.	Locks	4235	2 50
	Beck & Orr	Files	4236	1 25
	Berlin Ptg. Co.	Printing	4237	19 00
	H. Braun Sons & Co. .	Supplies	4238	5 47
	Blackwood, Green & Co.	Supplies	4239	5 71
	Bucher Eng. Co.	Cuts	4240	7 22
	Cols. Supply Co.	Supplies	4241	37 64
	Cols. M. & M. Supply Co.	Pipe, etc.	4242	115 99
	Cols. Hdwe. Co.	Tools, etc.	4243	19 57
	Cap. City Mach. Co. .	Supplies	4244	25 80
	Cols. Dry Goods Co. .	Supplies	4245	19 60
	Cols. Macadam Co.	Time	4246	15 81
	Champlin Ptg. Co.	Printing	4247	79 63

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Cols. Mdse. Co.	Supplies	4248	6 00
	Cols. Forge & Iron Co..	Forgings	4249	5 00
	Cols. Photo Supply Co..	Supplies	4250	9 70
5	J. P. Carlisle	Plaster	4251	2 75
	Cherrington Ptg. & Eng. Co.	Stamps	4252	1 00
	Cols. Dispatch	Advertising	4253	90
	Cen. Ohio Paper Co.	Paper	4254	3 25
	Cols. Lithograph Co.	Bonds	4255	35 00
	E. A. Cole & Co.	Coal	4256	36 95
	Cols. Brass Co.	Plumbing fixtures	4257	20 10
	Dunn, Taft & Co.	Supplies	4258	10 10
	E. Doddington & Co.	Tables, etc.	4259	58 89
	Engelke & Bigelow	Freight cartage	4260	7 50
	Electric Supply & Con- struction Co.	Wire	4261	4 54
	Erner Hopkins Co.	Supplies	4262	52 34
	F. W. Freeman	Groceries	4263	35 17
	J. J. Glenn	Plastering	4264	12 75
	Goodman Bros. ....	.....	4265	32 05
	Hatton Pharmacy	Carnations	4266	1 50
	Howald & Conklin	Mirror	4267	1 00
	Hann & Adair	Printing	4268	22 85
	H. M. Gates	Transit	4269	25 00
	H. Goldsmith.	Music	4270	3 40
	Harrington & Nonne- macher	Repairs	4271	2 00
	Krauss, Butler & Ben- ham	Mat	4272	2 00
	Kinnear & Co.	Carriage	4273	3 00
	Kauffman, Lattimer & Co.	Supplies	4274	56 93
	Kelton & Converse	Lumber	4275	35 92
	Lawrence Press Co.	Printing	4276	155 30
	M. C. Lilly Co.	Supplies	4277	27 50
	Murray City Coal Co..	Coal	4278	638 47
	C. E. Morris & Co.	Material	4279	1 25
	Monypenny Hammond Co.	Matches	4280	2 75
	G. C. Denney	June salary, inst.	4281	40 00
	Nitschke Bros.	Printing	4282	19 91
	Ohio State Journal	Pond adv.	4283	12 50
	Orr, Brown & Price	Supplies	4284	54 74
	C. J. Palmer	Repairing	4285	16 70
	E. Poulton	Castines	4286	80
	Pure Milk Co.	Milk tickets	4287	4 00
	Payne-McDonald Hdwe. Co.	Tools	4288	7 89
	Pletch & Sutton	Supplies	4289	4 70
	J. Penn	Feed, etc.	4290	58 09
	Ruggles, Gale Co.	Supplies	4291	6 40
	L. Roesler	Pictures	4292	7 85
	Reeves Bros.	Straps	4293	4 00
	V. Spohn	Tin	4294	1 50
	Sacket Mine Supply Co.	Supplies	4295	7 48
	Seraphim Blank Book Co.	Binding	4296	48 90
	Spahr & Glenn	Printing	4297	8 25
	Schroth & Potter	Poles	4298	1 40
	Standard Oil Co.	Oil	4299	11 39

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	Shilling Foundry Co. . .	Bars	4300	13 02
	Schoedinger, Fearn & Co.	Hardware	4301	29 02
	F. H. Tibbets	Envelopes	4302	1 40
	Tallmadge Hdwe. Co. . .	Hardware	4303	3 10
	J. M. & W. Westwater. .	Dishes	4304	33 85
	Zaner & Bloser	Certificate	4305	7 80
	Adrianse, Platt & Co. . .	Mower	4306	10 00
	Am. Totting Eng. Co. . .	Books	4307	59 00
	Am. Phar. Ass'n.	Books	4308	5 50
	Am. Devon Cattle Club . .	Books	4308	12 00
	Akron China Co.	Packing, etc.	4310	1 00
	Boston Book Co.	Packing, etc.	4311	53 00
	J. G. Biddle	Instrument	4312	161 00
	Baker Adamson Chem. Co.	Chemical	4313	25 48
	R. R. Bowker	Books	4314	3 00
	W. H. Anderson Co. . . .	Reports	4315	19 75
	Burrows Bros. & Co. . . .	Books	4316	33 99
	Crosby Steam Gage Co. . .	Repairing	4317	7 25
	C. C. Cummings	Books	4318	3 10
	G. L. English & Co. . . .	Models	4319	16 00
	Eimer & Amend	Supplies	4320	11 00
	Foote Mineral Co.	Chemicals	4321	1 00
	Financial Record	Adv. refunding bonds	4322	22 00
	G. C. Gillespie	Charts	4323	10 00
	W. & L. E. Gurley.	Repairing	4324	4 00
	C. F. Mason, bursar	Telegrams	4325	3 65
	B. Hessling	Book	4326	8 00
	Hausman, Dunn & Co. . . .	Scissors	4327	2 75
	S. Hawkridge	Supplies	4328	10 00
	Iron Trade Review	Adv.	4329	3 00
	O. Kuntze	Minerals	4330	3 00
	T. H. McAllister	Slides	4331	9 60
	A. C. McClurg Co.	Shakespeare	4332	67 50
	Nat. Science Estab.	Minerals	4333	100 00
	Std. Poland China Co. . . .	Bulletins	4334	5 00
	Smith Prem. Typewriter Co.	Supplies	4335	7 65
	A. A. Sphing	Frogs	4336	3 00
	Stumpf & Steurer	Bond adv.	4337	18 00
	G. E. Stechert	Books	4338	3 96
	Webb Sta. & Ptg. Co. . . .	Supplies	4339	3 25
	W. Whitestone	Squirrel feed	4340	4 00
	Westwater & Co.	Est. on No. 5 Vet. Bldg. . . .	4341	3,325 00
	W. W. Hackney	Band service	4342	12 00
	W. W. Boyd	Annual dues H. S. Com. . . .	4343	3 00
6	V. H. Davis	June salary	4344	83 33
	A. Cope	June salary	4345	187 50
8	C. C. Wilcox	Battalion clerk	4346	7 50
	J. E. Bender	Fees vet. clinic	4347	20 64
	S. E. Rasor	June salary	4348	100 00
	W. O. Thompson	June salary, inst.	4349	416 63
	C. E. Steeb	June salary, inst.	4350	83 37
10	K. H. Duncan	June salary, inst.	4351	66 74
	E. D. Cockins	June salary, inst.	4352	66 74
	E. R. Hubler	June salary, inst.	4353	40 00
	G. Bellows	June salary, inst.	4354	35 00
	M. F. Hines	June salary, inst.	4355	40 00
	M. Seymour	June salary, inst.	4356	5 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	W. C. McCracken	June salary, inst.	4357	150 00
	W. Standley	June salary, inst.	4358	65 00
	W. Case	June salary, inst.	4359	55 00
	G. R. Rose	June salary, inst.	4360	75 00
	B. LeBay	June salary, inst.	4361	55 00
	T. Boude	June salary, inst.	4362	50 00
	E. Kimmel	June salary, inst.	4363	25 00
	N. Slee	June salary, inst.	4364	20 00
	C. Lewis	June salary, inst.	4365	20 00
	J. V. Cranston	June salary, inst.	4366	45 00
	C. H. Woodruff	June salary, inst.	4367	70 00
	J. P. Covan	June salary, inst.	4368	83 37
	A. F. Hall	June salary, inst.	4369	73 37
	A. Case	June salary, inst.	4370	60 00
	J. Ricketts	June salary, inst.	4371	40 50
	T. E. Osborn	June salary, inst.	4372	45 00
	J. Kelley	June salary, inst.	4373	30 00
	M. S. Harvey	June salary, inst.	4374	25 00
	H. H. Hamilton	June salary, inst.	4375	12 50
	F. E. Beutler	June salary, inst.	4376	12 50
	R. M. Martin	June salary, inst.	4377	20 00
	C. M. Hicks	June salary, inst.	4378	45 00
	E. Conway	June salary, inst.	4379	25 00
	J. Brown	June salary, inst.	4381	15 00
	G. A. Goodspeed	June salary, inst.	4380	40 00
	J. Brown	June salary, inst.	4382	25 00
	W. R. Thomas	June salary, inst.	4383	40 00
	F. E. Fleischer	June salary, inst.	4384	20 00
	W. Whitestone	June salary, inst.	4385	40 00
	H. Chantler	June salary, inst.	4386	40 00
	W. Townsell	June salary, inst.	4387	20 00
	M. N. Cook	June salary, inst.	4388	40 00
	H. M. Templin	June salary, inst.	4389	40 00
	F. Andrix	June salary, inst.	4390	30 00
	J. W. Brown	June salary, inst.	4391	40 00
	T. F. Hunt	June salary, inst.	4392	250 00
	J. W. Decker	June salary, inst.	4393	170 00
	C. S. Plumb	June salary, inst.	4394	200 00
	F. Ruhlen	June salary, inst.	4395	90 00
	M. F. Miller	June salary, inst.	4396	100 00
	L. L. Hill	June salary, inst.	4397	33 33
	H. A. Weber	June salary, inst.	4398	225 00
	A. Vivian	June salary, inst.	4399	150 00
	R. L. Hirsch	June salary, inst.	4400	40 00
	G. W. McKnight	June salary, inst.	4401	250 00
	T. C. Smith	June salary, inst.	4402	130 00
	G. W. Rightmire	June salary, inst.	4403	115 00
	A. M. Eleile	June salary, inst.	4404	225 00
	C. B. Morrey	June salary, inst.	4405	140 00
	M. Dresbach	June salary, inst.	4406	80 00
	R. F. Seymour	June salary, inst.	4407	25 00
	W. C. Mills	June salary, inst.	4408	40 00
	P. Coutelier	June salary, inst.	4409	10 00
	J. N. Bradford	June salary, inst.	4410	210 00
	T. E. French	June salary, inst.	4411	150 00
	T. K. Lewis	June salary, inst.	4412	100 00
	S. Martin	June salary, inst.	4413	100 00
	J. V. Vosskueller	June salary, inst.	4414	120 00
	L. Shaw	June salary, inst.	4415	30 00
	H. C. Lord	June salary, inst.	4416	225 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	J. W. Smith	June salary, inst.	4417	100 00
	W. A. Kellerman	June salary, inst.	4418	225 00
	J. H. Shafner	June salary, inst.	4419	130 00
	J. G. Sanders	June salary, inst.	4420	25 00
	H. G. Burr	June salary, inst.	4421	25 00
	O. E. Jennings	June salary, inst.	4422	50 00
	J. McOwen	June salary, inst.	4423	33 33
	S. A. Norton	June salary, inst.	4424	125 00
	W. M. McPherson	June salary, inst.	4425	225 00*
	W. E. Henderson	June salary, inst.	4426	140 00
	C. W. Foulk	June salary, inst.	4427	120 00
	M. W. Mumma	June salary, inst.	4428	70 00
	C. E. Andrews	June salary, inst.	4429	30 00
	E. N. Webb	June salary, inst.	4430	60 00
	W. F. Coover	June salary, inst.	4431	30 00
	C. E. Sherman	June salary, inst.	4432	180 00
	A. H. Heller	June salary, inst.	4433	180 00
	F. H. Eno	June salary, inst.	4434	188 00
	W. L. Davies	June salary, inst.	4435	60 00
	H. D. Brunning	June salary, inst.	4436	125 00
	R. M. Royer	June salary, inst.	4437	62 50
	W. A. Landacre	June salary, inst.	4438	75 00
	E. Orton, Jr.	June salary, inst.	4439	200 00
	A. V. Bleininger	June salary, inst.	4440	100 00
	E. Ogden	June salary, inst.	4441	20 00
	M. A. Stoner	June salary, inst.	4442	180 00
	C. P. Souther	June salary, inst.	4443	120 00
	C. Elliott	June salary, inst.	4444	25 00
	F. C. Clark	June salary, inst.	4445	200 00
	J. E. Hagerty	June salary, inst.	4446	120 00
	F. H. Miesse	June salary, inst.	4447	30 00
	C. C. Huntington	June salary, inst.	4448	25 00
	D. R. Major	June salary, inst.	4449	160 00
	F. C. Caldwell	June salary, inst.	4450	190 00
	F. A. Fish	June salary, inst.	4451	110 00
	H. B. Brooks	June salary, inst.	4452	30 00
	A. C. Barrows	June salary, inst.	4453	225 00
	J. R. Taylor	June salary, inst.	4454	150 00
	W. H. Siebert	June salary, inst.	4455	180 00
	E. H. McNeal	June salary, inst.	4456	100 00
	C. S. Prosser	June salary, inst.	4457	190 00
	J. A. Bownocker	June salary, inst.	4458	160 00
	C. W. Meslon	June salary, inst.	4459	160 00
	C. Shoemaker	June salary, inst.	4460	7 50
	B. A. Eisenlohr	June salary, inst.	4461	80 00
	S. Barrows	June salary, inst.	4462	40 00
	J. R. Smith	June salary, inst.	4463	225 00
	A. W. Hodgeman	June salary, inst.	4464	160 00
	W. S. Elden	June salary, inst.	4465	130 00
	W. R. Lazenby	June salary, inst.	4466	225 00
	F. E. Sanborn	June salary, inst.	4467	200 00
	W. A. Knight	June salary, inst.	4468	120 00
	W. H. Renck	June salary, inst.	4469	100 00
	C. P. Crowe	June salary, inst.	4470	100 00
	W. Morelan	June salary, inst.	4471	30 00
	S. C. Derby	June salary, inst.	4472	225 00
	W. F. Hunter	June salary, inst.	4473	250 00
	J. H. Collins	June salary, inst.	4474	20 00
	J. A. Shauck	June salary, inst.	4475	100 00
	E. B. Kinkhead	June salary, inst.	4476	130 00

DETAILED STATEMENT OF DISBURSEMENTS—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
	W. H. Page	June salary, inst.	4477	200 00
	E. O. Randall	June salary, inst.	4478	80 00
	E. D. Howard	June salary, inst.	4479	25 00
	O. Jones	June salary, inst.	4480	145 00
	H. N. Townsend	June salary, inst.	4481	60 00
	G. Kellicott	June salary, inst.	4482	60 00
	M. Jeffrey	June salary, inst.	4483	60 00
	C. B. Guittard	June salary, inst.	4484	60 00
	E. Smythe	June salary, inst.	4485	40 00
	M. Hartford	June salary, inst.	4486	40 00
	J. C. Cone	June salary, inst.	4487	30 00
	R. D. Bohannon	June salary, inst.	4488	225 00
	G. W. McCoard	June salary, inst.	4489	160 00
	J. E. Boyd	June salary, inst.	4490	150 00
	C. L. Arnold	June salary, inst.	4491	130 00
	E. F. Coddington	June salary, inst.	4492	90 00
	H. W. Kuha	June salary, inst.	4493	110 00
	W. B. Skimming	June salary, inst.	4494	30 00
	W. T. Magruder	June salary, inst.	4495	225 00
	E. O. Hitchcock	June salary, inst.	4496	175 00
	H. Judd	June salary, inst.	4497	120 00
	L. Yost	June salary, inst.	4498	30 00
	E. G. Bailey	June salary, inst.	4499	30 00
	N. W. Lord	June salary, inst.	4500	200 00
	E. E. Sommermeirer ..	June salary, inst.	4501	110 00
	G. O. Spitler	June salary, inst.	4502	30 00
	G. Bruder	June salary, inst.	4503	20 00
	F. O. Ray	June salary, inst.	4504	200 00
	T. B. Simou	June salary, inst.	4505	30 00
	G. B. Kauffman	June salary, inst.	4506	200 00
	C. A. Dye	June salary, inst.	4507	110 00
	W. H. Scott	June salary, inst.	4508	225 00
	T. H. Haines	June salary, inst.	4509	130 00
	A. E. Davies	June salary, inst.	4510	90 00
	C. M. Berryman	June salary, inst.	4511	85 00
	C. P. Linhart	June salary, inst.	4512	160 00
	D. C. Huddleson	June salary, inst.	4513	80 00
	A. Wacker	June salary, inst.	4514	7 50
	B. F. Thomas	June salary, inst.	4515	225 00
	A. D. Cole	June salary, inst.	4516	200 00
	F. E. Kesler	June salary, inst.	4517	100 00
	L. B. Tuckerman, Jr. .	June salary, inst.	4518	70 00
	J. V. Denney	June salary, inst.	4519	225 00
	W. L. Graves	June salary, inst.	4520	130 00
	G. H. McKnight	June salary, inst.	4521	130 00
	G. Pennock	June salary, inst.	4522	30 00
	C. Ewalt	June salary, inst.	4523	30 00
	T. J. Muirle	June salary, inst.	4524	30 00
	T. H. Dickenson	June salary, inst.	4525	110 00
	B. L. Bowen	June salary, inst.	4526	225 00
	C. A. Bruce	June salary, inst.	4527	150 00
	J. D. Batchelder	June salary, inst.	4528	120 00
	H. DeNagy	June salary, inst.	4529	30 00
	D. S. White	June salary, inst.	4030	190 00
	S. Sisson	June salary, inst.	4031	160 00
	O. V. Brumley	June salary, inst.	4532	85 00
	H. W. Brown	June salary, inst.	4533	30 00
	H. E. Osborn	June salary, inst.	4534	225 00
	J. S. Hine	June salary, inst.	4535	120 00
	F. L. Landacre	June salary, inst.	4536	120 00

DETAILED STATEMENT OF DISBURSEMENTS—Concluded.

Date.	To whom paid.	For what purpose.	No.	Amount.
1903				
	O. H. Swezy	June salary, inst.	4537	30 00
	M. Morse	June salary, inst.	4538	15 00
	A. Rowe	June salary, inst.	4540	20 00
	J. H. Reitz	June salary, inst.	4539	40 00
	H. Lambdin	June salary, inst.	4541	16 00
	W. W. Boyd	June salary, inst.	4542	200 00
	A. Cope, bursar	Store room cards refunded	4543	506 73
	M. Waters	Store room cards	4544	35 00
	L. Weeks	June salary, inst.	4545	26 00
	Cols. Gas. Co.	May gas	4546	140 78
	Cent. U. Tele. Co.	Tele. rentals and tolls ..	4547	22 75
	Cols. Ry. Co.	Car tickets	4548	5 00
	J. McL. Smith	Expenses as trustee	4549	28 50
	E. A. Eggers	April, May and June salary	4550	675 00
	A. Cope, Secty.	Refund store room cards..	4551	300 00
11	J. L. Mack	Expenses	4552	23 25
	A. Cope, Secty.	Refund store room deposits	4553	200 00
	E. D. Howard	Sept. and May salary	4554	50 00
	M. E. Barr	Labor	4555	75
	H. I. Hadsell	Assistance	4556	7 50
	J. Bard	Dog feed	4557	5 00
	J. E. Bender	Fees vet. clinic	4558	39 25
	C. S. Fischer	Labor	4559	3 13
	F. A. Frederick	Campus work	4560	1 25
	B. F. Maag	June salary	4561	112 50
	A. Bolenbaugh	Student labor	4562	11 40
	C. P. Prosser	Supplies	4563	2 25
	C. F. Forster	Student labor	4564	11 40
	G. B. Ackerman	Assistance lab.	4565	2 70
	E. Ogden .....	.....	4566	1 75
	E. W. Easton	Labor	4567	6 20
	O. F. Metz	Labor	4568	6 08
	J. E. Bender	Fees vet clinic	4569	21 96
	W. McPherson	Supplies, petty	4570	7 10
	J. Hoffhine	Chemical lab. work	4571	3 80
	R. Thomas	Cleaning apparatus	4572	2 33
	J. I. Hadsell .....	.....	4573	5 25
	A. J. Hill	Cleaning apparatus	4574	4 80
	W. Yeagle	Hauling water	4575	11 10
	A. Cope, Secty. ....	.....	4576	225 00
	Babcock, Wilcox Co.	Half payment boiler contract	4577	2,130 00
	C. P. Souther	Petty supplies	4578	3 05
	C. P. Burkey .....	.....	4579	10 55
	A. McMichael	Engrossing diplomas	4580	42 00
23	A. Cope .....	.....	4581	150 00
	J. A. Wilkinson .....	.....	4582	9 15
	J. A. Stiver	Guide service	4583	17 25
	J. Mc L. Smith	Expenses	4584	8 60
	F. W. Porter	Supplies	4588	11 55
	C. H. Booth	Lab. work	4585	3 00
	I. Fischer	Student assistance	4586	21 95
	L. Huffman .....	.....	4587	26 13
	F. M. Lord .....	.....	4589	7 35
	H. L. Doud	Library work	4590	13 60
	C. McClintock	One-half June salary	4591	10 00
	R. L. Williamson	Watching armory	4592	8 25
	F. R. Kunkle .....	.....	4593	1 00
		Total		\$540,024 76
	L. F. Kiesewetter, Treas.	Transfer of balance	4594	6,910 28
		Total		\$546,935 04

STATEMENT III.

In compliance with section 7 of the *Organic Act*, passed by the Legislature of Ohio May 1, 1878, (Bates' Annotated Ohio Statutes, sec. 4105-41) which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Employees	Position.	Salary.
Wm. Oxley Thompson...	President	\$5,000 00
Alexis Cope	Secretary	2,250 00
Carl E. Steeb	Accountant	1,000 00
Katharine H. Duncan ..	Executive clerk	800 00
Edith D. Cockins	Registrar	800 00
Edith R. Hubler.....	Secretary's clerk and stenographer	480 00
Helen R. Powell.....	Assistant to registrar	40 00
Gertrude H. Bellows....	Assistant to registrar	280 00
Minnie F. Hines	Stenographer executive office	215 00
William C. McCracken..	Chief engineer	1,800 00
William Standley	First assistant engineer	780 00
William Case	S-cond assistant engineer...*	660 00
Benjamin LeBay	Steam fitter	660 00
Thomas Boude	First fireman	500 00
Fred Brewer	Second fireman	450 00
Marion Peck	Helper boiler house	240 00
J. L. Stainbrook	Third fireman	200 00
George R. Rose	Plumber	900 00
Earl Kimmel	Helper	300 00
Norman Slee	Student janitor, power house	180 00
Chas. Lewis	Student janitor, power house	180 00
Cranston, J. V.....	Helper in power house	405 00
C. H. Woodruff	Carpenter	840 00
J. P. Covan	Machinist and electrician	1,000 00
A. F. Hall	Machinist	880 00
Allando Case	Machinist	300 00
John Ricketts	Watchman	540 00
Thomas E. Osburn	Watchman	540 00
James Kelley	Lawn keeper	360 00
M. S. Harvey	Elevator man	250 00
H. H. Hamilton	Student janitor, Botanical hall	125 00
F. E. Beutler	Student janitor, Electrical laboratory	125 00
Raymond Pierce	Student janitor, Mechanical laboratory	162 00
R. M. Martin	Student janitor, Observatory	240 00
Chas M. Hicks	Janitor, University hall	540 00
Earl Conway	Helper, University hall	300 00
G. A. Goodspeed	Janitor, Chemical Hall	480 00
Chester McClintock	Helper, Chemical Hall	180 00
John Brown	Janitor, Hayes Hall	480 00
William R. Thomas....	Janitor, Gymnasium	480 00
F. E. Fleischer.....	Helper, Gymnasium	360 00
William Whitstine	Janitor, Biological Hall	480 00
Harry Chantler	Janitor, Orton Hall	480 00
Washington Townsell ..	Helper, Orton Hall	240 00
G. C. Denny	Janitor, Horticultural and Botanical Bldgs..	480 00
M. N. Cook	Janitor, Townshend Hall	480 00
J. K. Pritner	Helper, Townshend Hall	360 00
H. M. Templin	Janitor, Veterinary Hospital	480 00
Frances Andrix	Janitress, Orton and Page Halls	240 00
John W. Brown	Janitor, Page Hall	300 00
Thomas F. Hunt.....	Professor of Agriculture and Dean	2,500 00
John W. Decker.....	Professor of Dairying	1,700 00
Chas. S. Plumb	Professor of Animal Husbandry	2,000 00

STATEMENT III—Continued.

Employees	Position.	Salary.
Frank Ruhlen	Instructor in Zootechny	900 00
M. F. Miller	Instructor in Agronomy	1,000 00
F. E. Hamilton	Assistant in Agriculture	100 00
B. B. Herrick	Instructor in Cheesemaking	200 00
D. A. Crowner	Instructor in Buttermaking	200 00
Laurel L. Hill	Stenographer	400 00
H. A. Weber	Professor of Agricultural Chemistry	2,250 00
Alfred Vivian	Associate Professor of Agricultural Chem. ..	1,500 00
Rudolph Hirsch	Instructor in Agricultural Chemistry	400 00
George W. Knight	Professor of American His. and Pol. Science ..	2,500 00
Theodore C. Smith	Assistant Prof. Am. Hist. and Pol. Science ..	1,300 00
George W. Rightmire	Instructor in American History and Political Science and Law	1,150 00
A. M. Bleile	Professor of Anatomy and Physiology	2,250 00
C. B. Morrey	Associate Prof. of Anatomy and Physiology ..	1,400 00
Melvin Dresbach	Instructor in Anatomy and Physiology ..	800 00
Raymond J. Seymour	Assistant in Anatomy and Physiology	250 00
W. C. Mills	Curator of Archaeology	480 00
Pearl Coutellier	Stenographer	100 00
J. N. Bradford	Professor of Architecture and Drawing	2,100 00
T. E. French	Associate Prof. of Architecture and Draw'g ..	1,500 00
T. K. Lewis	Instructor in Architecture and Drawing	1,000 00
Silas Martin	Instructor in Architecture and Drawing	1,000 00
J. H. Vosskuehler	Instructor in Architecture and Drawing	1,200 00
Lucian Shaw	Student Assistant in Architec'e and Draw'g ..	300 00
J. S. Tidball	Assistant in Architecture and Drawing	360 00
H. C. Lord	Professor of Astronomy	2,250 00
J. Warren Smith	Lecturer in Meteorology	100 00
W. B. Skimming	Student Assistant in Meteorology	60 00
B. F. Maag	Assistant in Astronomy	450 00
W. H. Kellerman	Professor of Botany	2,250 00
J. H. Schaffner	Associate Professor of Botany	1,400 00
James G. Sanders	Fellow in Botany	250 00
Harriet G. Burr	Fellow in Botany	275 00
F. J. Tyler	Gardener and Herbarium Assistant	100 00
Otto E. Jennings	Gardner and Herbarium Assistant	600 00
James McOwen	Florist	400 00
S. A. Norton	Emeritus Professor of Chemistry	1,250 00
William McPherson	Professor of Chemistry	2,250 00
W. E. Henderson	Associate Professor of Chemistry	1,400 00
C. W. Foulk	Associate Professor of Chemistry	1,200 00
Marion W. Mumma	Assistant in Chemistry	700 00
Catherine E. Andrews	Fellow in Chemistry	300 00
E. N. Webb	Assistant in Chemistry	600 00
W. F. Coover	Student Assistant in Chemistry	180 00
C. E. Sherman	Professor of Civil Engineering and Acting Head of the Department	1,960 00
Albert H. Heller	Professor of Civil Engineering	1,800 00
Frank H. Eno	Associate Professor of Civil Engineering	1,650 00
W. L. Davies	Assistant in Civil Engineering	660 00
H. D. Brunning	Instructor in Civil Engineering	750 00
E. E. Harrold	Storekeeper	186 66
R. M. Royer	Assistant storekeeper	625 00
W. A. Landacre	Storekeeper	750 00
Edward Orton, Jr.	Professor of Ceramics and director of dep't. ..	2,000 00
A. V. Bleininger	Instructor in Ceramics	1,000 00
Ogden Ellsworth	National Brick Manufacturing scholarship ..	200 00
Metta Seymour	Stenographer	35 00
Minnie A. Stoner	Professor of Domestic Science	1,800 00
Cornelia P. Souther	Associate Professor of Domestic Art	1,200 00

STATEMENT III—Continued.

Employees	Position.	Salary.
Cora Elliott	Janitress, Domestic Science.....	250 00
F. C. Clark	Professor of Economics and Sociology.....	2,000 00
J. E. Hagerty	Assistant Professor of Economics and Sociology	1,200 00
F. H. Miesse	Fellow in Economics and Sociology.....	300 00
C. C. Huntington.....	Fellow in Economics and Sociology.....	250 00
David R. Major.....	Associate Professor of Education	1,600 00
F. C. Caldwell	Professor of Electrical Engineering.....	1,900 00
F. A. Fish	Assistant Professor of Electrical Engineering	1,100 00
H. B. Brooks.....	Student Assistant in Electrical Engineering.....	300 00
A. C. Barrows	Professor of English Literature	2,250 00
J. R. Taylor.....	Associate Professor of English Literature.....	1,500 00
W. H. Siebert	Professor of European History	1,800 00
Edgar H. McNeal	Instructor in European History	1,000 00
Charles S. Prosser.....	Professor of Geology.....	1,900 00
John H. Bownocker.....	Professor of Inorganic Geology and Curator of Geological Museum	1,600 00
E. A. Eggers.....	Professor of Germanic Languages and Literature	2,250 00
C. W. Mesloh.....	Associate Professor of Germanic Languages and Literatures	1,600 00
B. A. Eisenlohr.....	Instructor in Germanic Languages and Literatures	800 00
Sarah Barrows	Assistant in Germanic Languages and Literatures	400 00
J. R. Smith	Professor of Greek	2,250 00
A. W. Hodgman.....	Associate Professor of Classical Languages.....	1,600 00
W. S. Elden	Assistant Professor of Classical Languages.....	1,300 00
W. R. Lazenby	Professor of Horticulture and Forestry.....	2,250 00
Vernon H. Davis	Assistant Professor of Horticulture and Forestry	1,000 00
F. E. Sanborn.....	Professor of Industrial Arts and Director of the Department	2,200 00
W. A. Knight	Assistant Professor Machine Shop Practice.....	1,320 00
W. H. Renck	Instructor in Pattern Making and Founding.....	1,100 00
C. P. Crowe	Instructor in Forging	1,100 00
Wilbert Morelan	Fellow in Industrial Arts.....	300 00
S. C. Derby	Professor of Latin	2,250 00
W. F. Hunter	Professor of Law and Dean of College of Law	2,500 00
J. H. Collins	Professor of Law	200 00
J. A. Schauck	Professor of Law	1,000 00
E. B. Kinkead	Professor of Law	1,300 00
W. H. Page	Professor of Law	2,000 00
E. O. Randall	Professor of Law	800 00
E. D. Howard	Instructor in Law	250 00
Florence Price	Stenographer Law College.....	400 00
Olive B. Jones	Librarian	1,450 00
F. H. Bohn	Assistant Reference Librarian	60 00
Harriet Townshend	Assistant in Library	600 00
Gertrude Kellicott	Assistant in Library	600 00
Maud Jeffrey	Assistant in Library	600 00
C. B. Guittard	Assistant in Library	600 00
Elizabeth Smythe	Stenographer in Library	400 00
Martha Hartford	Assistant in Library	400 00
J. C. Cone	Fellow in Library	225 00
R. D. Bohannon	Professor of Mathematics	2,250 00
G. W. McCoard	Associate Professor of Mathematics	1,600 00
J. E. Boyd	Associate Professor of Mathematics	1,500 00

STATEMENT III—Continued.

Employees	Position.	Salary.
C. L. Arnold	Assistant Professor of Mathematics	1,300 00
E. F. Coddington	Assistant Professor of Mathematics	900 00
H. W. Kuhn	Assistant Professor of Mathematics	1,100 00
S. E. Rasor	Instructor in Mathematics	1,000 00
W. B. Skimming	Fellow in Mathematics	300 00
W. T. Magruder	Professor of Mechanical Engineering	2,250 00
E. A. Hitchcock	Professor of Experimental Engineering	1,750 00
Horace Judd	Assistant Prof. Experimental Engineering	1,200 00
Lloyd Yost	Fellow in Mechanical Engineering	300 00
E. G. Bailey	Fellow in Experimental Engineering	300 00
N. W. Lord	Professor of Metallurgy and Mineralogy	2,000 00
E. E. Sommermeir	Instructor in Metallurgy and Mineralogy	1,100 00
G. O. Spitzer	Student Assistant in Metallurgy and Miner'y	300 00
Gustav Bruder	Bandmaster	200 00
Frank A. Ray	Professor of Mine Engineering	2,000 00
T. B. Simon	Student Assistant	300 00
George B. Kauffman	Professor of Pharmacy and Dean	2,000 00
C. A. Dye	Assistant Professor of Pharmacy	1,100 00
W. H. Scott	Professor of Philosophy	2,250 00
T. H. Haines	Assistant Professor of Philosophy	1,300 00
A. E. Davies	Instructor in Philosophy	900 00
C. P. Linhart	Professor of Physical Education	1,600 00
C. M. Berryman	Director of Physical Education for Women	850 00
D. C. Huddleson	Instructor in Physical Education	800 00
Alma H. Wacker	Student Assistant for Women	75 00
B. F. Thomas	Professor of Physics	2,250 00
A. D. Cole	Professor of Physics	2,000 00
F. E. Kester	Assistant Professor of Physics	1,000 00
L. B. Tuckerman, Jr.	Assistant in Physics	700 00
J. V. Denney	Prof. of Rhetoric and English Language	2,250 00
W. L. Graves	Assist. Prof. Rhetoric and English Language	1,300 00
G. H. McKnight	Assist. Prof. Rhetoric and English Language	1,300 00
T. Herbert Dickenson	Assist. Prof. Rhetoric and English Language	1,100 00
Gilbert Pennock	Fellow in Rhetoric and English Language	300 00
Clara G. Ewalt	Fellow in Rhetoric and English Language	300 00
F. J. Muir	Fellow in Rhetoric and English Language	300 00
B. L. Bowen	Professor of Romance Languages	2,250 00
C. A. Bruce	Assistant Professor of Romance Languages	1,200 00
J. D. Batchelder	Associate Professor of Romance Languages	1,500 00
Hermine DeNagy	Assistant in Romance Languages	300 00
D. S. White	Professor of Veterinary Medicine	1,900 00
Paul Fischer	Professor of Pathology	1,260 00
Septimus Sisson	Associate Professor of Veterinary Medicine	1,600 00
O. V. Brumley	Assistant Professor of Veterinary Medicine	850 00
J. McI. Phillips	Instructor in Veterinary Medicine	375 00
John H. Rietz	Student Assistant in Veterinary Medicine	60 00
Alice Rowe	Stenographer Dept. of Veterinary Medicine	120 00
H. W. Brown	Substitute Janitor, Veterinary Hospital	270 00
Herbert Osborn	Professor of Zoology and Entomology	2,475 00
J. S. Hine	Associate Prof. of Zoology and Entomology	1,250 00
F. L. Landacre	Associate Prof. of Zoology and Entomology	1,300 00
Otto H. Swezey	Fellow in Zoology and Entomology	300 00
Max Morse	Student Ass't in Zoology and Entomology	150 00
Helen Lambdin	Stenographer	112 00
W. W. Boyd	High School Visitor	2,000 00
Mildred Waters	Stenographer, Hayes Hall	350 00
Lily Weeks	Janitress at Gymnasium	174 00

COLUMBUS OHIO, September 25, 1903.

To the Board of Trustees, Ohio State University:

The finance committee in obedience to your instructions has examined the accounts and vouchers of F. W. Prentis, treasurer of the university, for the fiscal year ending, June 30, 1903, and has carefully compared them with the accounts and vouchers in the hands of the secretary, and hereby certify that said report is correct.

D. M. MASSIE,
PAUL JONES,
Finance Committee.

Report of treasurer of the Ohio State University to the Secretary of Agriculture and the Secretary of the Interior, of amount received under act of Congress of August 30, 1890, in aid of Colleges of Agriculture and the Mechanic Arts, and of the disbursements thereof, to and including June 30, 1903.

	Amount.
Balance on hand July 1, 1902	\$122 14
Date of receipt of installment for 1902-3, July 11, 1902, Amount.....	25,000 00
Total available for year ended June 30, 1903	\$25,122 14
Disbursements thereof for and during the year ended June 30, 1903:	
Agriculture, as per Schedule A	\$4,276 66
Mechanic Arts, as per Schedule B	6,465 00
English Language, as per Schedule C.	1,940 00
Mathematical Science, as per Schedule D	2,410 00
Natural or Physical Science, as per Schedule E	8,598 33
Economic Science, as per Schedule F	1,240 00
Total expended during year	\$24,929 99
Balance remaining unexpended July 1, 1903	192 15

I hereby certify that the above account is correct and true, and, together with the schedules hereunto attached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction.

F. W. PRENTISS, Treasurer.

SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Thomas F. Hunt, Professor	Agriculture	\$750 00
John W. Decker, Professor	Dairying	510 00
Charles S. Plumb, Professor.....	Animal Husbandry	600 00
M. F. Miller, Instructor	Agronomy	300 00
Frank Ruhlen, Instructor	Zootechny	270 00
D. S. White, Professor	Veterinary Medicine	380 00
Paul Fischer, Professor	Pathology	360 00
Septimus Sisson, Professor	Veterinary Medicine	320 00
O. N. Brumley, Assistant Professor.	Veterinary Medicine	170 00
W. R. Lazenby, Professor	Horticulture and Forestry.....	450 00
Vernon H. Davis, Assistant Prof...	Horticulture and Forestry.....	166 66
	Total	\$4,276 66

SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Jos. N. Bradford, Professor	Architecture and Drawing.....	\$420 00
T. E. French, Associate Professor..	Architecture and Drawing.....	300 00
J. H. Vosskuehler, Instructor	Architecture and Drawing.....	240 00
Silas Martin, Instructor	Architecture and Drawing.....	200 00
T. K. Lewis, Instructor	Architecture and Drawing.....	200 00
J. S. Tidball, Assistant	Architecture and Drawing.....	100 00
Lucien Shaw, Assistant	Architecture and Drawing.....	60 00
C. E. Sherman, Professor	Civil Engineering	360 00
A. H. Heller, Professor	Civil Engineering	360 00
F. H. Eno, Associate Professor ...	Civil Engineering	300 00
H. D. Brunning, Assistant	Civil Engineering	125 00
W. L. Davies, Assistant	Civil Engineering	120 00
Edward Orton, Professor	Ceramics	400 00
A. V. Bleininger, Instructor.....	Ceramics	200 00
F. C. Caldwell, Professor	Electrical Engineering	380 00
F. A. Fish, Assistant Professor....	Electrical Engineering	220 00
T. E. Sanborn, Professor	Industrial Arts	400 00
W. A. Knight, Assistant Professor..	Machine Shop Practice	240 00
W. H. Renck, Instructor	Pattern Making and Founding..	200 00
C. P. Crowe, Instructor	Forging	200 00
W. T. Magruder, Professor	Mechanical Engineering	450 00
E. A. Hitchcock, Professor	Experimental Engineering.....	350 00
Horace Judd, Assistant Professor..	Experimental Engineering	240 00
F. A. Ray, Professor	Mine Engineering	400 00
	Total	\$6,465 00

SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
A. C. Barrows, Professor	English Literature	\$450 00
J. R. Taylor, Associate Professor..	English Literature	300 00
J. V. Denney, Professor	Rhetoric and English Language	450 00
W. L. Graves, Assistant Professor..	Rhetoric and English Language	260 00
Geo. H. McKnight, Assistant Prof. ..	Rhetoric and English Language	260 00
T. H. Dickenson, Assistant Prof. ..	Rhetoric and English Language	220 00
	Total.....	\$1,940 00

SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Henry C. Lord, Professor	Astronomy	\$450 00
W. G. Skimming, Assistant	Astronomy	30 00
R. D. Bokannan, Professor	Mathematics	450 00
Geo. W. McCoard, Associate Prof. ..	Mathematics	320 00
Jas. E. Boyd, Associate Professor ..	Mathematics	300 00
C. L. Arnold, Assistant Professor..	Mathematics	260 00
H. W. Kukn, Assistant Professor ..	Mathematics	220 00
S. E. Razor, Instructor	Mathematics	200 00
E. F. Coddington, Assistant	Mathematics	180 00
	Total.....	\$2,410 00

SCHEDULE E.

Disbursements for instruction in Natural Science or Physical Science and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
H. A. Weber, Professor	Agricultural Chemistry	\$675 00
Alfred Vivian, Associate Professor.	Agricultural Chemistry	450 00
Rudolph Hirsch, Assistant	Agricultural Chemistry	40 00
A. M. Bleile, Professor	Anatomy and Physiology	675 00
C. B. Morrey, Associate Professor ..	Anatomy and Physiology	420 00
M. Dresbach, Instructor	Anatomy and Physiology	240 00
R. J. Seymour, Assistant	Anatomy and Physiology	25 00
W. A. Kellerman, Professor	Botany	450 00
J. H. Schaffner, Associate Professor.	Botany	260 00
O. E. Jennings, Florist	Botany	100 00
Jas McOwen, Assistant	Botany	33 33
S. A. Norton, Professor	Chemistry	250 00
W. McPherson, Professor	Chemistry	450 00
W. E. Henderson, Associate Prof. ..	Chemistry	280 00
C. W. Foulk, Associate Professor..	Chemistry	240 00
M. W. Mumma, Assistant	Chemistry	140 00
E. N. Webb, Assistant	Chemistry	120 00
C. S. Prosser, Professor	Geology	380 00
Jno. A. Bownocker, Professor	Geology	320 00
N. W. Lord, Professor	Metallurgy and Mineralogy....	400 00
E. E. Sommermeier, Instructor	Metallurgy and Mineralogy	220 00
Geo. B. Kauffman, Professor	Pharmacy	200 00

SCHEDULE E—Concluded.

Names of Instructors.	Subject Taught for Which Paid From "Morrill Fund."	Amount.
C. A. Dye, Assistant Professor	Pharmacy	110 00
B. F. Thomas, Professor	Physics	450 00
A. D. Cole, Professor	Physics	400 00
F. E. Kester, Assistant Professor	Physics	200 00
L. B. Tuckerman, Assistant	Physics	140 00
H. Osborn, Professor	Zoology and Entomology	450 00
J. S. Hine, Associate Professor	Zoology and Entomology.....	240 00
F. L. Landacre, Associate Professor.	Zoology and Entomology.....	240 00
		Total.....
		\$8,598 33

SCHEDULE F.

Disbursements for instruction in Economic Science and for facilities for such instruction during the year ended June 30, 1903.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Minnie A. Stoner, Professor	Domestic Science	\$360 00
Cornelia P. Souther, Associate Prof..	Domestic Art.....	240 00
F. C. Clark, Professor	Economics and Sociology	400 00
Jas. E. Hagerty, Assistant Professor.	Economics and Sociology	240 00
		Total.....
		\$1,240 00

OHIO STATE UNIVERSITY

THIRTY-THIRD ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

TO THE

GOVERNOR OF OHIO

FOR THE

Year Ending June 30, 1903

PART II

The State has no material resorces at all comparable with its citizens
and no hope of perpetuity except in the intelligence
and integrity of its people.



SPRINGFIELD, OHIO:
THE SPRINGFIELD PUBLISHING CO
STATE PRINTERS.
1903

Entered at the Postoffice at Columbus, Ohio, as Second-Class Matter.

1903.

[illegible]

1904.

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	..	..	..	1	2	3	4	5	6	..	..	1	2	3	4	5
..	..	..	5	6	7	8 9	..	8	9	10	11	12	13	..	7	8	9	10	11	12
..	11	12	13	14	15	16	..	15	16	17	18	19	20	..	14	15	16	17	18	19
..	18	19	20	21	22	23	..	..	23	24	25	26	27	..	21	22	23	24	25	26
..	25	26	27	28	29	30	..	29	..	..	..	..	..	..	28	29	30	31	..	..

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	..	..	2	3	4	5	6	7	..	..	..	1	2	3	4
..	..	..	6	7	8	9	..	9	10	11	12	13	14	..	..	..	8	9	10	1
..	11	12	13	14	15	16	..	16	17	18	19	20	21	..	13	14	15	16	17	18
..	18	19	20	21	22	23	..	23	14	25	26	27	28	19	20	21	22	..	..	..
..	25	26	27	28	29	30	..	..	31	..	..	..	..	..	..	..	..	..	..	..

BOARD OF TRUSTEES

1902-1903

		Term Expires.
THOMAS J. GODFREY.....	Celina	May 13 1903.
J. McLAIN SMITH.....	Dayton	" 1904.
PAUL JONES	Columbus	" 1905.
OSCAR T. CORSON.....	Columbus	" 1906.
DAVID M. MASSIE.....	Chillicothe	" 1907.
JOHN T. MACK.....	Sandusky	" 1908.
MYRON T. HERRICK.....	Cleveland	" 1909.
GUY W. MALLON.....	Cincinnati	" 1910.

OFFICERS OF THE BOARD.

OSCAR T. CORSON.....	President.
PAUL JONES	Vice President.
ALEXIS COPE	Secretary.
FREDERICK W. PRENTISS.....	Treasurer.

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T. J. GODFREY	J. McLAIN SMITH	D. M. MASSIE
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PAUL JONES	OSCAR T. CORSON	MYRON T. HERRICK

FACULTY AND COURSES OF STUDY.

JOHN T. MACK	OSCAR T. CORSON	THOS. J. GODFREY
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DAYS AND DATES

1903

Summer Session, Lake Laboratory, Sandusky.....	June 15 to September 15.
Summer Courses in Surveying.....	June 19 to July 17.
Summer Courses in Shopwork.....	June 22 to July 18.
Entrance Examinations (8 a. m.).....	{ Monday, September 21.
	{ Tuesday, September 22.
First Term begins—Registration Day.....	Tuesday, September 22.
Lectures and Class-work begin.....	Wednesday, September 23.
President's Annual Address (11 a. m.).....	Friday, September 25.
Meeting of Trustees.....	Wednesday, September 23.
Latest Date of Admission to candidacy for a degree at the Commencement of June, 1904.....	Wednesday, October 7.
Thanksgiving Recess	{ Thursday, November 26.
	{ Friday, November 27.
Latest date for filing Thesis subjects.....	Tuesday, December 15.
First Term ends.....	Wednesday, December 23.
Christmas Vacation.	

1904

Second Term begins—Registration Day.....	Tuesday, January 5.
Washington's Birthday	Monday, February 22.
Second Term ends.....	Friday, April 1
Spring Recess.	
Third Term begins—Registration Day.....	Wednesday, April 6
Meeting of Trustees.....	Wednesday, April 6
Field Day—Athletic Association.....	Saturday, May 14.
Senior Vacation begins.....	Saturday, May 28.
Competitive Drill—Cadet Battalion.....	Saturday, May 28.
Memorial Day	Monday, May 30.
Latest Date for Presenting Thesis.....	Friday, June 10.
Final Examinations	{ Monday, June 13.
	{ to
	{ Friday, June 17.
Latest Date for Filing bound Copy of Thesis.....	Friday, June 17.
Baccalaureate Sermon	Sunday, June 19.
Entrance Examinations (8 a. m.).....	{ Monday, June 20.
	{ Tuesday, June 21.
Class Day	Monday, June 20.
Meeting of Trustees.....	Tuesday, June 21.
Alumni Day	Tuesday, June 21.
COMMENCEMENT	Wednesday, June 22.
Summer Vacation.	
Summer Session, Lake Laboratory, Sandusky.....	June 15 to September 15.
Summer Courses in Surveying.....	June 17 to July 15.
Summer Courses in Shopwork.....	June 20 to July 16.
Entrance Examinations (8 a. m.).....	Monday, September 19.
First Term begins—Registration Day.....	Tuesday, September 20.
Lectures and Class-work begin (all Colleges).....	Wednesday, September 21.
Meeting of Trustees.....	Wednesday, September 21.
Annual Address by the President (11 a. m.).....	Friday, September 23.

ADMINISTRATIVE OFFICERS

THE UNIVERSITY

- WILLIAM OXLEY THOMPSON, D. D. LL. D.....President
Office, University Hall, Campus.
- ALEXIS COPE.....Secretary to Board of Trustees and Bursar
Office, University Hall; office hours 8 to 12 a. m.; 2 to 5 p. m.
- WILBUR H. SIEBERT, M. A.....Secretary of the General Faculty
Office, University Hall.
- EDITH D. COCKINS, B. A.....Registrar
Office, University Hall; office hours 8 to 11:45 a. m.; 1:30 to 4 p. m., except
Saturday.
- KATHARINE H. DUNCAN.....Executive Clerk
Office, University Hall; office hours 8 to 11 a. m.; 1 to 4 p. m.; Saturday
9 to 11 a. m.
- CARL E. STEEB, B. Ph.....Accountant
Office, University Hall; office hours 8 to 12 a. m.; 2 to 5 p. m.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

- JOSEPH V. DENNEY, B. A.....Dean
Office, Registrar's office, University Hall; office hours 11 a. m., Monday and
Friday, and at 12 m. Tuesdays and Thursdays.
- ALFRED D. COLE, M. A.....Secretary
Office, Registrar's office, University Hall; office hours 9 a. m. Monday and
Wednesday; 10 a. m. Friday.
- GEORGE W. KNIGHT, Ph. D.....Chairman of the Administrative Board of
the Graduate School.
Office, Room 15, University Hall; office hours 9 a. m. Monday, Tuesday and
Thursday.
- BENJAMIN F. THOMAS, Ph. D.....Chairman of the Committee on Admission
to Advanced Standing.
Office, Room 13, University Hall.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE.

- HOMER C. PRICE, M. Sc.....Dean
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Office, Horticultural Hall.

COLLEGE OF ENGINEERING.

- EDWARD ORTON, JR., E. M.....Dean
Office, Room 4, Orton Hall.
- FRANK E. SANBORN, S. B.....Secretary
Office, University Hall; office hours 9 to 10 a. m. daily, except Saturday.

COLLEGE OF LAW.

WILLIAM F. HUNTER.....Dean
Office, Page Hall.
WILLIAM H. PAGE, B. A., LL. M.....Secretary
Office, Page Hall.

COLLEGE OF PHARMACY.

GEORGE B. KAUFFMAN, B. S.....Dean
Office, Chemical Hall.
WILLIAM McPHERSON, Ph. D.....Secretary
Office, Chemical Hall; office hours Wednesday 9 a. m.

COLLEGE OF VETERINARY MEDICINE.

DAVID S. WHITE, D. V. M.....Dean
Office, 1b Veterinary Laboratory; office hours 1 p. m. daily.
SEPTIMUS SISSON, S. B., V. S.....Secretary
Office, 6b Veterinary Laboratory; office hours 1 p. m. daily.

OTHER OFFICERS.

WILLIAM W. BOYD, M. A.....High School Visitor
WILLIAM C. McCracken.....Chief Engineer
Office, Power House.
JOHN A. BOWNOCKER, D. S.....Curator of Geological Museum
WILLIAM C. MILLS, B. S.....Curator of Archæological Museum

THE UNIVERSITY FACULTY

THE UNIVERSITY FACULTY

Members of the University Faculty, and Other Instructors

1902-1903

WILLIAM OXLEY THOMPSON.....University Grounds
President

A. B., Muskingum College, 1878; A. M., *ibid.*, 1881; D. D., *ibid.*, 1891; LL. D., Western University of Pennsylvania, 1897. Licensed by the Presbytery of Zanesville, Dresden, Ohio, April, 1881; Ordained by Presbytery of Fort Dodge, Iowa, July, 1882; Pastor Odebolt, Iowa, 1882-1885; Pastor Longmont, Colorado, 1885-'91; President Longmont College, 1885-89; President Miami University, 1891-99; present position since 1899.

THOMAS CORWIN MENDENHALL.....
Emeritus Professor of Physics

Ph. D., Ohio State University, 1878; D. Sc. Rose Polytechnic Institute; LL. D., University of Michigan, 1887; Professor of Physics and Mechanics, Ohio State University, 1873-1878; Professor of Physics, Imperial University of Japan, 1878-1881; Professor of Physics, Ohio State University, 1881-1884; Professor U. S. Signal Corps, 1884-1886; President Rose Polytechnic Institute, 1886-1889; Superintendent U. S. Coast and Geodetic Survey, 1889-1894; President Worcester Polytechnic Institute, 1894-1901.

ROBERT WHITE McFARLAND.....Oxford, Ohio
Emeritus Professor of Civil Engineering

A. B., Ohio Wesleyan University, 1847; A. M., the same, 1850; LL. D., the same, 1881; Teacher in Academies, 1847-'51; Chillicothe Public Schools, 1852-'53; Professor of Mathematics and Astronomy, Madison College, 1853-'56; Professor, same chair, Miami University, 1856-'73; Captain 86th O. V. I., 1862; Lieutenant-Colonel of the same, 1863-64; Professor of Mathematics, Astronomy and Civil Engineering, Ohio State University, 1873-85; State Inspector of Railroads 1881-85; President of Miami University 1885-88; Civil and Mining Engineer 1888-99.

SIDNEY AUGUSTUS NORTON.....363 East Town Street
Emeritus Professor of Chemistry

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Keenyon, 1878; LL. D., Wooster, 1881; LL. D., Union, 1889; Student at Bonn, Leipzig, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; Lecturer in Chemistry, 1895-'99; present position since 1899.

STILLMAN W. ROBINSON.....1353 Highland Street
Emeritus Professor of Mechanical Engineering

C. E., University of Michigan, 1863; D. Sc., Ohio State University, 1896; Assistant Engineer U. S. Lake Survey, 1863-'66; Instructor in Engineering, University of Michigan, 1866-'67; Assistant Professor Mining Engineering and Geodesy, University of Michigan, 1867-'70; Professor Mechanical Engineering and Physics, University of Illinois, 1870-'78; Professor Mechanical Engineering and Physics, Ohio State University, 1878-'81; Professor Mechanical Engineering, Ohio State University, 1881-'95 (Resigned in 1895); Consulting Mechanical Engineer and Inventor for Wire Grip and McKay Shoe Machinery Companies, 1884-'98; Elected Emeritus Professor of Mechanical Engineering, Ohio State University, 1899; State Inspector of Railroads and Bridges, 1880-'84; Consulting Engineer Santa Fe R. R., 1887-'90; Consulting Engineer Lick Telescope and Mountings, 1887.

WILLIAM HENRY SCOTT.....131 Fifteenth Avenue
Professor of Philosophy

B. A., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884; Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-'65; Pastor of Main Street (now Trinity) M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street (now First) M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio Univer-

sity, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

NATHANIEL WRIGHT LORD.....338 West Eighth Avenue
Professor of Mineralogy and Metallurgy, Director of the School of Mines.

E. M., Columbia, 1876; Assistant Engineer, Cincinnati, 1877; Engineer and Metallurgist Monte Grande Gold Mining Co., Nicaragua, 1878; Assistant School of Mines, O. S. U., 1879; Chemist Ohio Geological Survey, 1880-'88; Assistant Professor of Mining and Metallurgy, O. S. U., 1880-'87; Professor Mining and Metallurgy, O. S. U., 1887-'91; Professor Metallurgy and Mineralogy, O. S. U., 1896; Chemist State Board of Agriculture, 1881-'99; Chemist State Board of Health, 1896-'98; present position since 1896.

SAMUEL CARROLL DERBY.....93 Fifteenth Avenue
Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination); Principal of Schools, Iilon, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Latin, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

WILLIAM RANE LAZENBY.....348 West Eighth Avenue
Professor of Horticulture and Forestry

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887; Instructor Horticulture and Botany, Cornell, 1874-'77; Assistant Professor of Horticulture, Cornell, 1877-'81; Lecturer, N. Y. State Grange, 1874-'81; Director Ohio U. S. Experiment Station, 1882-'87; Professor of Botany and Horticulture, Ohio State University, 1881-'92; Collaborator United States Bureau of Forestry, 1901-'03; present position since 1892.

JOSIAH RENICK SMITH.....950 Madison Avenue
Professor of the Greek Language and Literature

A. B., Amherst, 1871; A. M., Amherst, 1883; Principal, Mound Street School, Columbus, 1871-'73; Teacher, Columbus High School, 1873-'76; Assistant Professor of Ancient Languages, Ohio State University, 1876-'81; Student at Leipzig, 1881-'83; present position since 1883.

HENRY ADAM WEBER.....1342 Forsythe Avenue
Professor of Agricultural Chemistry

Graduate of Polytechnic School, Kaiserslautern, 1866; Student, Chemistry under Von Liebig and Reischauer, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879; Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, University of Illinois, 1874-'82; Chemist to State Board of Agriculture, Illinois, 1874-'82; Chemist to State Board of Health, Illinois, 1874-'82; State Chemist and Chief Chemist to Ohio State Dairy and Food Commissioner, 1885-'97; present position since 1884.

BENJAMIN FRANKLIN THOMAS.....University Grounds
Professor of Physics, and State Sealer of Weights and Measures

B. Sc., Ripon, 1874; M. Sc., Ripon, 1877; Ph. D., Stevens Institute, 1880; Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-'79; Professor of Physics, University of Missouri, 1880-'85; Member of the Board of Examiners at the International Electrical Exhibition at Philadelphia, 1884; Member of the Jury of Awards, Department of Electricity, at the World's Columbian Exposition, Chicago, 1893; present position since 1885.

GEORGE WELLS KNIGHT.....85 Jefferson Avenue
Professor of American History and Political Science and of Law

A. B., University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884; Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Professor of History and Political Science, Ohio State University, 1887-'98; Student at Universities of Halle, Berlin, and Friburg, 1889-'90; present position since 1898.

ROSSER DANIEL BOHANNAN.....Sixteenth and Indianola Avenues
Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876; Student of Mathematics and Physics, Cambridge, England, 1880-'82; Göttingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emory and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant in Mathematics and Physics, University of Virginia, 1884-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1895.

*ERNEST AUGUST EGGERS.....910 West Eleventh Avenue., University Grounds
Professor of Germanic Languages and Literatures

Student in Gymnasium at Hanover, at Michigan State Normal School, the Sorbonne, College de France; Instructor in German in the High Schools of Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

ALBERT MARTIN BLEILE.....218 King Avenue
Professor of Astronomy and Physiology

M. D., Starling Medical College, 1876; Student, Vienna, Chemistry and Physiology, 1876-'77; Student, Physiology, Leipzig, 1877-'78; Student Anatomy and Histology, Paris, 1878-'79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

WILLIAM ASHBROOK KELLERMAN.....175 Eleventh Avenue
Professor of Botany

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881; Professor of Natural Science, Wisconsin State Normal School, 1874-'79; Professor of Botany and Horticulture, Kentucky State College, 1881-'82; Professor of Botany and Zoology, Kansas State Agricultural College, 1883-'87; Professor of Botany, Kansas State Agricultural College, 1881-'91; Botanist, Kansas State Board of Agriculture, 1883-'91; Ohio Geological Survey (Botany) 1892-'93; Founder and Editor of the Journal of Mycology; present position since 1891.

THOMAS FORSYTH HUNT.....188 West Tenth Avenue
Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science.

B. Sc., University of Illinois, 1884; M. Sc., University of Illinois, 1892; D. Agr., University of Illinois, 1903; Assistant to Illinois State Entomologist, 1885-'86; Assistant in Agriculture, University of Illinois, 1886-'88; Assistant Agriculturalist, Illinois Experiment Station, 1888-'91; Professor of Agriculture, Pennsylvania State College, 1891-'92; present position since 1892.

GEORGE BEECHER KAUFFMAN.....University Grounds
Professor of Pharmacy, and Dean of the College of Pharmacy

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio., 1894; Associate Professor of Pharmacy, Ohio State University, to 1894; present position since 1894.

BENJAMIN LESTER BOWEN.....775 East Broad Street
Professor of Romance Languages and Literatures

A. B., University of Rochester, 1881; Ph. D., John Hopkins University, 1888; post graduate work, University of Rochester, 1881-'82; Professor of Languages, New Windsor College, Maryland, 1882-'83; Graduate Student and Assistant in French, Johns Hopkins University, 1883-'86, and 1887-'88; Student at the Universities of Paris, Bonn, Rome and Madrid, 1885, and 1886-'87; Professor of French and Latin, Bowdoin College 1888-'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889-'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890-'94; present position since 1894.

JOSEPH VILLIERS DENNEY.....230 West Tenth Avenue
Professor of Rhetoric and the English Language, and Dean of the College of Arts, Philosophy and Science

A. B., University of Michigan, 1885; Journalist, 1885-'88; Principal of the Aurora (Illinois) High School, 1888-'90; Instructor in English and Graduate Student, University of Michigan, 1890-'91; Associate Professor of Rhetoric, Ohio State University, 1891-'94; present position since 1894.

ALLEN CAMPBELL BARROWS.....85 West Tenth Avenue
Professor of English Literature

A. B., Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889; Teacher, Latin and Greek, Phillips Academy, 1865-'66; Professor of Physics, Western Reserve, 1866-'70; Professor of Latin and English Literature, Western Reserve, 1870-'71; Professor of English Literature and History, Iowa Agricultural College, 1887-'94; present position since 1894.

EDWARD ORTON, JR.....The Normandie
Professor and Director of the Department of Clay-Working and Ceramics and Dean of the College of Engineering

E. M., Ohio State University, 1884; Assistant on Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885-'86; Superintendent of Blast Furnace at New Straitsville, O., 1887-'88; Superintendent of Victoria Furnace, Goshen Bridge, Va., 1888; Steel Worker, Homestead Steel Works, Homestead, Pa., 1889; Superintendent Ohio Paving Company's Factory, Columbus, Ohio, 1890-'92; Special Assistant on Clays, Ohio Geological Survey, 1892; Superintendent Acme Vitrified Brick Co., Louisville, Kentucky, 1893; Secretary American Ceramic Society, 1899; State Geologist of Ohio, 1899; present position since May, 1894.

*Died April 8th, 1903.

WILLIAM FORREST HUNTER.....1032 Bryden Road
Professor of Law and Dean of the College of Law

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892-'96; present position since 1896.

JAMES HENRY COLLINS.....The Chittenden; New Hayden Building
Professor of Law

In practice for thirty years; present position since 1891.

EMILIUS OVIATT RANDALL.....1025 Oak Street; Supreme Court Building
Professor of Law

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892; admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter Supreme Court of Ohio; present position since 1893.

WILLIAM THOMAS MAGRUDER.....191 King Avenue
Professor of Mechanical Engineering

M. E., Stevens Institute of Technology, 1881; Practical Experience in Machine Design and Shop Practice, Taunton, Mass., 1881-'86; Student in Chemistry and Mathematics, etc., Johns Hopkins University, 1886-'87; Adjunct Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887-'96; present position since July, 1896.

EDGAR BENTON KINKEAD.....Wyandotte Avenue; New Hayden Building
Professor of Law

Assistant State Law Librarian, 1887-'94; Special Counsel for Attorney-General of Ohio, 1897-1900; present position since 1895.

WILLIAM HERBERT PAGE.....1063 Franklin Avenue; 27 Board of Trade
Professor of Law

B. A., Yale, 1889; LL. B., Ohio State University, 1892; LL. M., same institution, 1894; Instructor in Central High School, Columbus, Ohio, 1889-'96; present position since September, 1896.

WILLIAM McPHERSON.....University Campus
Professor of Chemistry

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State University, 1895; Ph. D., University of Chicago, 1899; Instructor in Chemistry and Physics, Toledo High School, 1887-'89; Instructor in Chemistry and Latin, Toledo High School and Manual Training School, 1889-'92; Assistant in Chemistry, Ohio State University, 1892-'93; Assistant Professor in Chemistry, Ohio State University 1893-'95; Associate Professor, General Chemistry, Ohio State University, 1895-'97; present position since 1897.

JOSEPH NELSON BRADFORD.....54 West Tenth Avenue
Professor of Architecture and Drawing

M. E., Ohio State University, 1883; Draftsman, Ohio Geological Survey, 1882-'83; Motor Power Department, Pennsylvania Railroad, 1883-'85; Assistant in Mechanical Engineering and Drawing, Ohio State University, 1885-'90; Assistant Professor of Drawing, Ohio State University, 1890-'93; Associate Professor of Drawing, Ohio State University, 1893-'99; present position since 1899.

DAVID WHITE STUART WHITE.....West Fifth Avenue
Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine

D. V. S., Ohio State University, 1890; Student, Royal Veterinary Schools of Hanover, Berlin, 1890-'91; at Imperial Veterinary Institute of Vienna, 1892; Royal Veterinary College, of Dresden, 1893; Assistant in Veterinary Medicine, Ohio State University, 1893-'95; present position since 1895.

HERBERT OSBORN.....485 King Avenue
Professor of Zoology and Entomology

B. Sc., Iowa Agricultural College, 1879; M. Sc., same institution, 1880; Student of Entomology at Museum Comparative Zoology (Cambridge, Mass.) 1881-82; College of Physicians and Surgeons, Des Moines, 1884-'85 (Anatomy and Physiology); Zoological Station, Naples (Smithsonian table), 1894-'95; Assistant in Zoology and Entomology, Iowa Agricultural College, 1890-'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884-'85; Professor of Zoology and Entomology, Iowa Agricultural College, 1886-'98; Special Agent Division of Entomology, U. S. Department of Agriculture, 1885-'94; Entomologist, Iowa Experiment Station, 1890-'98; State Entomologist, Iowa, 1898; present position since 1898.

CHRISTOPHER P. LINHART.....O. S. U. Gymnasium; The Vendome
Professor of Physical Education and Director of the Gymnasium.

M. D., Western Reserve University, Cleveland, 1882; Post Graduate Student, same institution, 1882-'83; Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; Student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1883-'85; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86, and Assistant Visiting Physician, Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark (N. J.) Academy, 1887 and 1890, and Director of Physical Education, Newark (N. J.) Public Schools, 1888-'90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-'97; Director of the Gymnasium and Instructor in Physical Education, O. S. U., 1897-1900; present position since 1900.

OLIVE B. JONES.....58 Eleventh Avenue
Librarian

Assistant Librarian, 1887; present position since 1893.

HENRY CURWEN LORD.....University Grounds
Professor of Astronomy and Director of the Emerson McMillen Observatory

B. Sc., University of Wisconsin, 1889; Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891-'94; Director and Associate Professor of Astronomy O. S. U., 1895-1900; elected Fellow, Royal Astronomical Society, 1897; present position since 1900.

FRANK EDWIN SANBORN.....303 West Eighth Avenue
Professor and Director of the Department of Industrial Arts

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889; Assistant in Drawing, Massachusetts Institute of Technology, 1889-'90; Teacher in Manual High School Department, Pratt Institute, 1890-'91; Walker Special Instructor, Tufts College, 1891-'94; Instructor in Mechanical Department, Tufts College, 1894-'98; Director of the Department of Industrial Arts, O. S. U., 1898-1900; present position since September, 1900.

FRANK ARNOLD RAY.....137 King Avenue
Professor of Mine Engineering

E. M., Ohio State University, 1887; Superintendent Building Construction, Elah Terral & Co., 1887-'88; Assistant Mining Engineer of C. & H. C. & I. Co., 1888-'89; Chief Engineer C. & H. C. & I. Co., 1899-92; Chief Engineer Congo Mining Co., 1892-'95; Assistant Professor of Mine Engineering, O. S. U., 1895-'97; Associate Professor, 1897-1900; present position since 1900.

FREDERICK CONVERSE CLARK.....1634 Nell Avenue
Professor of Economics and Sociology

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891; Student at Halle, Leipzig and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Science, and Acting Head of the Department, Stanford University, 1892-'93; Assistant Professor of Political Economy, 1893; Assistant Professor of Economics and Sociology, Ohio State University, 1895-'98; Associate Professor, 1898-1900; present position since 1900.

JOHN ALLEN SHAUCK.....95 Winner Avenue; Supreme Court Building
Professor of Law

B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M., Otterbein University, 1870; LL. D., Otterbein University, 1897; Judge of the Supreme Court of Ohio; Lecturer on Supreme Court Practice Ohio State University, 1898-1900; present position since 1900.

CAPT. GEORGE L. CONVERSE, U. S. A. (Retired)..94 Hoffman Ave., 23 East State St.
Professor of Military Science and Tactics

Present position since 1900.

†PAUL FISCHER.....250 Marshall Avenue
Professor of Pathological Anatomy

B. Sc., Ohio State University, 1891; D. V. M., 1892; Assistant in Veterinary Medicine, O. S. U., 1892-'95; Student in Royal Veterinary Colleges of Hanover, Berlin and Dresden, three semesters, 1893 and 1894; Professor of Agriculture and Veterinary Science, Utah Agricultural College, 1895-'97; Professor of Veterinary Science and Veterinarian of Kansas Experiment Station, Kansas State Agricultural College, 1897-1900; State Veterinarian of Kansas and Honorary Veterinarian to the Kansas State Board of Agriculture, 1897-1900; Bacteriologist Kansas State Board of Health, 1897-1900; State Veterinarian of Ohio since 1902; present position since 1900.

†Resigned April 1st, 1903.

JOHN WRIGHT DECKER.....325 West Eighth Avenue
Professor of Dairying

B. Agr., University of Wisconsin, 1890; Fellow in Agriculture, University of Wisconsin, 1890-'91; Instructor in Dairying, University of Wisconsin, 1891-'99; Associate Professor of Dairying, Ohio State University, 1899-1901; present position since 1901.

EMBURY ASBURY HITCHCOCK.....380 West Eighth Avenue
Professor of Experimental Engineering

M. E., Cornell, 1890; Straight Line Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State University, 1893-'95; Assistant Professor of Mechanical Engineering in charge of the Department, 1895-'96; Assistant Professor of Experimental Engineering, Ohio State University, 1896-'97; Associate Professor of Experimental Engineering, Ohio State University, 1897-1901; present position since 1901.

FRANCIS CARY CALDWELL.....401 West Sixth Avenue
Professor of Electrical Engineering

A. B., Cornell, 1890; M. E., Cornell, 1891; with Thomson-Houston Electric Co., Lynn, Mass., 1891-'92; Student at the National Polytechnic School, Zurich, 1892-'93; Assistant Professor of Electrical Engineering, Ohio State University, 1893-'97; Associate Professor of Electrical Engineering, 1897-1901; present position since 1901.

CHARLES SMITH PROSSER.....114 West Tenth Avenue
Professor of Geology

B. S., Cornell University, 1883; M. S., Cornell University, 1886; Fellow in Natural History, Cornell, 1884-'85; Instructor in Paleontology, Cornell University, 1885-'88; Assistant Paleontologist, U. S. Geological Survey, 1888-'92; Professor of Natural History, Washburn College, Topeka, Kansas, 1892-'94; Assistant Geologist, U. S. Geological Survey, 1893-'94; Professor of Geology, Union College, Schenectady, N. Y., 1894-'99; Assistant Geologist, N. Y. Geological Survey, 1895-'99; Assistant Geologist, University Geological Survey of Kansas, 1896; Chief Appalachian Division, Maryland Geological Survey, 1898-1902; Assistant Geologist, Ohio Geological Survey and U. S. Geological Survey since 1900; Associate Professor of Historical Geology, Ohio State University, 1899-1901; present position since 1901.

JOHN ADAMS BOWNOCKER.....1594 Neil Avenue
Professor of Inorganic Geology and Curator of the Museum

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897; Principal of High School, Martins Ferry, 1889-'92; Fellow in Geology, University of Chicago, 1892-'94; Graduate Scholar, Yale University, 1894-'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1893; Assistant Geologist Ohio Survey, 1900; Assistant in Geology, 1895-'98; Assistant Professor, 1898-'99; Associate Professor of Inorganic Geology and Curator of the Museum, 1899-1901; present position since 1901.

ALFRED DODGE COLE.....1662 Neil Avenue
Professor of Physics

A. B., Brown University, 1884; A. M., 1887; Graduate Student, Johns Hopkins University, 1884-'85; Harvard University, Summer School, 1887; Student University of Berlin, 1894-'95; Graduate Student, University of Chicago, Summer, 1898; Instructor in Chemistry and Physics, Denison University, 1885-'87; Acting Professor, 1887-'88; Professor of Physics and Chemistry, 1888-1901; Graduate Student and Assistant in Physical Laboratory, University of Chicago, Summers of 1899 and 1900; present position since September, 1901.

MINNIE AVA NELLIE STONER.....
Professor of Domestic Science and Head of Department of Domestic Economy

B. Sc., South Dakota College, 1890; Assistant in South Dakota State Normal, Madison, S. D., 1890-'92; Student in Boston Normal School of Household Arts; 1892-'93; graduated in class '93 with Normal Diploma in Domestic Science and Art; Investigation at Harvard, 1893; Superintendent Y. W. C. A., Industrial School, Lincoln, Neb., 1894; Demonstration Lecture work at Fort Smith, Ark., 1895, in Mr. Aubrey's School; Professor of Domestic Arts, University of Tennessee, Knoxville, 1896-98; Dean of the Woman's Department and Professor of Domestic Science, Kansas State Agricultural College, 1898-1901; Investigations at Wesleyan University, Middletown, Conn., in Summer School of Biology and chemistry, 1902; present position since 1901.

WILBUR HENRY SIEBERT.....206 West Tenth Avenue
Professor of European History and Secretary of the University Faculty

A. B., Ohio State University, 1888; A. B. (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890; Student, Freiburg and Berlin, 1890-'91; Student, Harvard, 1895; Assistant in History and Political Science, Ohio State University, 1891-'93; Assistant Professor of History, Ohio State University, 1893-'95, 1897-'98; Student, Harvard University, 1895-'97; Associate Professor of European History, 1898; present position since 1902.

CHRISTOPHER ELIAS SHERMAN.....772 Oak Street
Professor of Civil Engineering

C. E., Ohio State University, 1894; engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years during college course; engaged in railroad, geological and governmental engineering from graduation until September, 1896; Engineer to Park Commission, Springfield, Ohio, and U. S. Assistant Engineer at Tampa, Florida, and Huntsville, Alabama, summer of 1898; U. S. Assistant Engineer on Roads and Bridges, Yellowstone National Park, summer of 1899 and 1900; Assistant in Civil Engineering, Ohio State University, 1896-'97; Assistant Professor of Civil Engineering, Ohio State University, 1897-1901; Associate Professor of Civil Engineering, Ohio State University, 1901-'02; present position since 1902.

ALBERT HENRY HELLER.....1249 Neil Avenue
Professor of Civil Engineering

C. E., Ohio State University, 1890; Draftsman, Massillon Bridge Co., 1890-'91; Draftsman, Mt. Vernon Bridge Co., 1892; Assistant Chief Engineer, The Youngstown Bridge Co., 1893-'99; Chief Engineer The Youngstown Bridge Co., 1899-1900; Assistant to Vice-President of the American Bridge Co., 1900; in charge of Operating Engineering Department of the American Bridge Co., at Pittsburg, 1901; present position since 1902.

CHARLES SUMNER PLUMB.....107 West Eleventh Avenue
Professor of Animal Husbandry

B. S., Massachusetts Agricultural College, 1882; Associate Editor, "Rural New Yorker," 1883-'84; First Assistant, New York State Experiment Station, 1884-'87; Professor of Agriculture, University of Tennessee, and Assistant Director Tennessee Experiment Station, 1887-1890; Professor of Agricultural Science, Purdue University, 1890-'94; Professor Animal Industry and Dairying, Purdue University, 1894-1900; Professor Animal Industry, Purdue University, 1900-'02; Vice-Director Indiana Agricultural Experiment Station, 1890-'91; Director Indiana Agricultural Experiment Station, 1891-1902; present position since 1902.

WILLIAM W. BOYD.....29 South Monroe Avenue
High School Visitor

M. A., Marietta College, 1884; present position since 1902.

GEORGE WASHINGTON MCCOARD.....232 Wilbur Avenue
Associate Professor of Mathematics

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882; Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873-'74; Private Tutor in Cleveland, Ohio, 1874-'80; Principal of Public Schools, Irving Park, Chicago, 1880-'81; Teacher of Latin and Mathematics, Columbus High School, 1881-'82; Assistant in Mathematics and Latin, Ohio State University, 1882-'87; Assistant Professor of Mathematics, Ohio State University, 1887-'99; present position since 1899.

CHARLES WALTER MESLOH.....University Grounds
Associate Professor of Germanic Languages and Literatures

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895; Student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Assistant in German, Ohio State University, 1889-'95; present position since 1895.

ARTHUR WINFRED HODGMAN.....164 West Ninth Avenue
Associate Professor of the Classic Languages

A. B., Harvard, 1890; A. M., Harvard, 1893; Ph. D. (Classical Philology) Harvard, 1896; Student in Graduate School, Harvard (Classical Philology), 1892-'96; Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1896-'97; Assistant Professor of the Classic Languages, Ohio State University, 1897-'99; present position since September, 1899.

CORNELIA PORTER SOUTHER.....
Associate Professor of Domestic Art

Graduate of Mary Institute (Washington University), St. Louis, Mo., 1883; Certificated Student at Mary Institute, 1883-'85; Handarbeitslehrerinnen-Seminar des Carola-Vereins, Leipzig, 1896-'97; Investigations in Domestic Art Methods in foreign cities, 1896-'98; Teacher of Sewing, Mrs. Ball's Private School, St. Louis, 1898; Special Student at Pratt Institute, Brooklyn, and Teachers' College, Columbia University, New York, 1899; Assistant Professor of Domestic Art, Ohio State University, 1899-1900; present position since 1900.

CLARA MAUD BERRYMAN.....95 West Eleventh Avenue
Director and Associate Professor of Physical Education for Women

Graduated from Wisconsin Academy, 1893; University of Wisconsin, 1893-'95; Abroad 1896; graduated from Dr. Sargent's Normal School, Honors in Theory, 1900; graduate work, Harvard Summer School, 1902; present position since 1900.

WILLIAM EDWARDS HENDERSON.....234 West Tenth Avenue
Associate Professor of Chemistry

A. B., University of Wooster, 1891; Ph. D., Johns Hopkins University, 1897; Graduate Student, Johns Hopkins University, 1893-'97; Fellow in Chemistry, Johns Hopkins University, 1896-'97; Professor of Natural Sciences, College of Emporia, Kansas, 1891-'93; Professor of Chemistry, Ohio University, 1897-'99; Assistant Professor of Chemistry, Ohio State University, 1899-1901; present position since 1901.

JOSEPH RUSSEL TAYLOR.....222 King Avenue
Associate Professor of English Literature.

B. A., Ohio State University, 1887; M. A., Columbia University, 1897; Assistant in Drawing, Ohio State University, 1889-'94; Assistant in Rhetoric, Ohio State University, 1894-'97; University Fellow in Literature, Columbia University, 1896-'97; Assistant Professor of Rhetoric, Ohio State University, 1897-'99; Assistant Professor of English Literature, Ohio State University, 1899-1901; present position since 1901.

JAMES ELLSWORTH BOYD.....60 West Maynard Avenue
Associate Professor of Mathematics

B. Sc., Ohio State University, 1891; M. S., Cornell, 1896; Student in Physics and Mathematics, Ohio State University, 1893-'95; Student in Experimental and Theoretical Physics, Cornell, 1896-'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1896; Assistant in Physics, Ohio State University, 1891-'95; held scholarship in Physics, Cornell, 1895; Assistant Professor of Physics, Ohio State University, 1896-1901; present position since September, 1901.

CHARLES A. BRUCE.....235 West Tenth Avenue
Associate Professor of the Romance Languages

A. B., Ohio State University, 1895; Student of French, Amherst, Summer School, 1895; Graduate Student, University of Chicago, Summer Quarter, 1896; Student, University of Geneva, Summer School, 1898; Student at the Sorbonne, College de France, and Ecole des Hautes-Etudes, Paris, 1898-'99; Graduate Student, University of Chicago, Summer Quarter, 1900; Assistant in French, Ohio State University, 1895-'99; Assistant Professor of Romance Languages, Ohio State University, 1899-1901; present position since 1901.

SEPTIMUS SISSON
Associate Professor of Veterinary Medicine

S. B., University of Chicago, 1898; Ontario Veterinary College, 1891; Demonstrator of Anatomy, Ontario Veterinary College, 1891-'99; Graduate Student, University of Chicago, Summer Quarters of 1900-'01; Associate Professor of Veterinary Science and Zoology, Kansas State Agricultural College, 1899; Professor of Zoology, *ibid.*, 1900; present position since 1901.

THOMAS EWING FRENCH.....1458 Worthington Street
Associate Professor of Architecture and Drawing

M. E., Ohio State University, 1895; Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Valle Company, Dayton, 1888-'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888-'91; Chief Draftsman, The Smith-Valle Company, Dayton, 1891; Assistant in Drawing, 1892-'98; Assistant Professor of Drawing, 1898-1901; present position since 1901.

DAVID R. MAJOR.....292 King Avenue
Associate Professor of Education

S. B., Wabash College, 1890; Ph. D., Cornell University, 1896; Higher Diploma in Education, Teachers' College, Columbia University, 1899; Principal of Schools, Warren, Indiana, 1890-'92; Graduate Student in Philosophy and Sociology, Cornell University, 1892-'96; Scholar in Philosophy, 1894-'95; Fellow, 1895-'96; Principal of High School, Frankfort, Indiana, 1896-'98; Fellow in Education, Teachers' College, Columbia University, 1898-'99; Graduate Student, University of Chicago, Summer Quarter, 1899; Acting Professor of Pedagogy, University of Nebraska, 1899-1900; Assistant in Education, Teachers' College, Columbia University, 1900-'01; present position since 1901.

CHARLES WILLIAM FOULK.....1656 Neil Avenue
Associate Professor of Chemistry

B. A., Ohio State University, 1894; Commercial Analytical Work, 1894-'96; Assistant in General Chemistry, 1896-'98; Student, Physical-Chemical Institute, Leipzig, 1899-1901; Assistant Professor of Chemistry, Ohio State University, 1898-1902; present position since 1902.

JOHN H. SCHAFFNER.....40 West Tenth Avenue
Associate Professor of Botany

A. B., Baker University, Kansas, 1893; A. M., University of Michigan, 1894; M. S., Baker University, 1896; Student in Botany, Zoology and Geology, University of Michigan, 1893-'95; Student in Botany and Paleo-Botany, University of Chicago, 1896-'97; Assistant in Botany, University of Michigan, 1894-'95; Professor of Natural Sciences, South Dakota University, 1895-'96; Assistant in Botany, Ohio State University, 1897-'99; Assistant Professor of Botany, 1899-1902; present position since 1902.

CHARLES BRADFIELD MORREY.....86 King Avenue.
Associate Professor of Anatomy and Physiology

B. A., Ohio State University, 1890; Post-graduate Student, Ohio State University, 1890-'91; M. D., Starling Medical College, 1896; Assistant in Latin, Ohio State University, 1890-'91; Assistant in Latin and Physiology, 1891-'92; Assistant in Physiology, Ohio State University, 1892-'97; Student in Vienna and Paris, 1897-'99; Assistant Professor of Anatomy and Physiology, Ohio State University, 1899-'1902; present position since 1902.

JAMES STEWART HINE.....1340 Hunter Avenue
Associate Professor of Zoology and Entomology

B. Sc. (H. and F.), Ohio State University, 1893; Superintendent of the N. W. Substation of the Ohio Agricultural Experiment Station, 1893; Assistant in Horticulture, Ohio State University, 1894; Student in Entomology, Cornell, 1895; Assistant in the Division of Entomology of the United States Department of Agriculture, summers of 1897 and 1899; Assistant in Entomology, 1895-'99; Assistant Professor of Zoology and Entomology, Ohio State University, 1899-1902; present position since 1902.

FRANCIS LEROY LANDACRE.....299 West Sixth Avenue
Associate Professor in Zoology and Entomology

B. A., Ohio State University, 1895; Student in Chicago University, Summer Quarters of 1898 and of 1899; Professor of Embryology in Ohio Medical University since 1896; Assistant in Zoology and Entomology, Ohio State University, 1895-1900; Assistant Professor Zoology and Entomology, 1900-'02; present position since 1902.

WALLACE S. ELDEN.....1462 Neil Avenue
Associate Professor of Classical Languages

A. B., Bowdoin, 1889; A. M., Bowdoin, 1892; Ph. D., University of Michigan, 1900; Student in Johns Hopkins University, 1889-'90; Headmaster, Rectory School, Hamden, Conn., 1890-'91; Student in Johns Hopkins University, 1891-'92; Instructor in Latin and French, Ohio State University, 1892-'94; Instructor in the Romance Languages, University of Michigan, 1894-'96; Instructor in Latin and Greek, University of Maine, 1896-'97; Assistant Professor of the Classic Languages, University of Maine, 1897-'99; Student in the University of Michigan, 1899-1900; Assistant Professor of the Classic Languages, Ohio State University, 1900-'02; present position since September, 1902.

FRANK HARVEY ENO.....316 West Eighth Avenue
Associate Professor of Civil Engineering

B. S., University of Illinois, 1891; C. E., University of Illinois, 1894; Assistant Engineer and Superintendent Department of "Water Supply, Sewerage and Fire Protection," World's Columbian Exposition, 1891-'93; Assistant to Consulting Engineer, Chicago, Ills., 1894-'95; City Engineer, Winnetka, Ills.; 1895-'98; Assistant Engineer and Chief Draftsman, City Engineer's Office, Columbus, Ohio, 1898-1902; present position since 1902.

ALFRED VIVIAN.....244 West Tenth Avenue
Associate Professor of Agricultural Chemistry

Ph. G., University of Wisconsin, 1894; Instructor in Pharmacognosy, University of Wisconsin, 1894-'95; Assistant in Agricultural Chemistry, University of Wisconsin, 1895-'97; Instructor in Agricultural Chemistry and Assistant Chemist to Experiment Station, 1897-1902; present position since 1902.

J. WARREN SMITH.....1422 Oak Street
Lecturer on Meteorology

B. S., New Hampshire College of Agriculture and Mechanic Arts, 1888; M. S., N. H. C. of A. & M. A., 1899; special course in Meteorology at Harvard University in 1890 and 1891; employed in United States Weather Bureau since 1888; present position Section Director in charge Columbus Station and the Ohio Section of the Climate and Crop Division of the Bureau.

WILLIAM LUCIUS GRAVES.....1313 Forsythe Avenue
Assistant Professor of Rhetoric and English Language

B. A., Ohio State University, 1893; M. A., Ohio State University, 1897; Instructor in High School, Coshocton, 1894-'95; Fellow and Assistant in Rhetoric and English Language, Ohio State University, 1895-'96; present position since 1896.

CLAIR ALBERT DYE.....233 West Eleventh Avenue
Assistant Professor of Pharmacy

G. Ph., Ohio State University, 1891; Post-graduate Student in Chemistry and Pharmacy, Ohio State University; Ph. D., University of Bern, 1901; Assistant in Chemistry and Pharmacy, 1890-'94; Assistant in Pharmacy, 1894-'98; present position since 1898.

CHARLES LINCOLN ARNOLD.....328 West Eighth Avenue
Assistant Professor of Mathematics

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894; Student, University of Chicago, summer term 1894-'95; Assistant in Mathematics, Ohio State University, 1890-'99; present position since 1899.

KARL DALE SWARTZEL.....57 East Eighth Avenue
Assistant Professor of Mathematics

B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894; Fellow and Assistant in Mathematics, Ohio State University, 1894-'95; Assistant in Mathematics, Ohio State University, 1895-'96; Austin Scholar, Harvard University, 1902-'03; present position since 1899.

GEORGE H. McKNIGHT.....312 West Seventh Avenue
Assistant Professor of Rhetoric and English Language

A. B., Cornell, 1892; Ph. D., Cornell, 1896; Instructor in English at Cornell, 1892-'97; Cornell Traveling Fellow in English Philology, 1897-'98; Student in Freiburg, 1897-'98; Student in Paris and London, 1898-'99; present position since 1899.

FRED A. FISH.....
Assistant Professor of Electrical Engineering

M. E. in E. E., Ohio State University, 1898; Fellow in Electrical Engineering, Ohio State University, 1898-'99; Assistant, 1899-1900; Honorary Fellow in Electrical Engineering, University of Wisconsin, 1900-'01; present position since 1901.

WILLIAM ABNER KNIGHT.....206 West Lane Avenue
Assistant Professor of Machine Shop Practice

M. E., Ohio State University, 1900; thirteen years' practical experience in work-shops; Assistant in the Industrial Department and Foreman of the Machine Shops, 1898-'98; Assistant in Industrial Arts and Instructor in Machine Work, 1898-1900; Instructor in Machine Work, 1900-'01; present position since 1901.

HARRY WALDO KUHN.....234 West Tenth Avenue
Assistant Professor of Mathematics

B. Sc., Ohio State University, 1897; Ph. D., Cornell University, 1901; Fellow and Assistant in Mathematics, Ohio State University, 1897-'98; Oliver Scholar in Mathematics at Cornell, 1898-'99; Erastus Brooks Fellow in Mathematics, Cornell, 1899-1900; Assistant in Mathematics, Cornell, 1900-'01; present position since 1901.

JAMES E. HAGERTY.....212 Tenth Avenue
Assistant Professor of Economics and Sociology

A. B., Indiana University, 1892; Ph. D., University of Pennsylvania, 1900; Instructor in Mathematics LaPorte High School, 1892-'96; Graduate Student University of Chicago, 1896-'97; Honorary Fellow in Economics, University of Wisconsin, 1897-'98; Student at Berlin and Halle, 1898-'99; Harrison Fellow in Sociology, University of Pennsylvania, 1899-1900; Senior Fellow in Sociology, University of Pennsylvania, 1900-'01; present position since 1901.

THEODORE C. SMITH.....244 West Tenth Avenue
Assistant Professor of American History and Political Science

A. B., Harvard, 1892; A. M., Harvard, 1893; Ph. D., 1896; Graduate Student, Harvard, 1892-'94, 1895-'96; Fellow in American History, University of Wisconsin, 1894-'95; Ozias Goodwin Memorial Fellow, Harvard, 1896-'97; Student at Universities of Geneva, Paris and Berlin, 1896-'97; Instructor in History, University of Michigan, 1897-'98; Instructor in History, Vassar College, 1898-1900; present position since 1901.

J. D. BATCHELDER.....Hotel Vendôme
Assistant Professor of Romance Languages

A. B., University of Vermont, 1894; Instructor Greek and French, Shattuck Military Academy, 1894-'95; LL. B., Minnesota, 1896; Post-graduate Work, 1896-'97-'98; University of Berlin; University of Oxford; University of Madrid; University of Paris; University of Rome; Fellow by Courtesy, Johns Hopkins, 1898-'99; Summer Semester, Harvard, 1899; Fellow by Courtesy, Johns Hopkins, 1899-1900; Instructor in Romance Languages, University of Iowa, 1900-'01; Assistant Professor of Romance Languages, University of Iowa, 1900-'01; present position since 1901.

FREDERICK EDWARD KESTER.....1473 Neil Avenue
Assistant Professor of Physics

M. E. (in E. E.), Ohio State University, 1895; M. A., Cornell, 1899; Fellow and Assistant in Physics, Ohio State University, 1895-'97; Assistant in Physics, Ohio State University, 1897-'98; held scholarship in Physics, Cornell, 1898; Instructor in Physics, Ohio State University, 1899-1901; present position since 1901.

†Absent on leave.

THOMAS HARVEY HAINES.....310 West Seventh Avenue
Assistant Professor of Philosophy

B. A., Haverford College, Haverford, Pa., 1896; M. A., Haverford College, 1897; M. A., Harvard University, 1898; Ph. D., Harvard University, 1901; Assistant in Philosophy, Harvard University, 1898-'99; present position since 1901.

†ALONZO HUBERT TUTTLE.....215 West Tenth Avenue
Assistant Professor of American History and Political Science.

A. B., University of Michigan, 1896; Assistant Principal of High School, Ishpeming, Mich., 1896-'98; Principal of High School, Ironwood, Mich., 1898-1900; Instructor in American History and Political Science, Ohio State University, 1900-'02; Graduate Student, Universities of Wisconsin and Michigan, 1902-'03; present position since 1902.

VERNON H. DAVIS.....University Grounds
Assistant Professor of Horticulture and Forestry

B. Sc., (Agr.), Ohio State University, 1900; M. S. A., Cornell University, 1901; Assistant in Horticulture and Forestry, Ohio State University, 1901-'02; present position since 1902.

OSCAR V. BRUMLEY.....University Grounds
Assistant Professor of Veterinary Medicine

Veterinary Surgeon's Certificate, Ohio State University, 1897; practiced 1897-'98; Graduate Student in Royal Veterinary College, Berlin, Germany, 1902; present position since 1898.

HORACE JUDD.....245 West Fourth Avenue
Assistant Professor of Experimental Engineering

M. E., Ohio State University, 1897; M. Sc., Ohio State University, 1899; Fellow and Laboratory Assistant in Mechanical Engineering, Ohio State University, 1897-'99; Student in Experimental Engineering at Cornell and Stevens Institute of Technology, summer of 1898; Instructor in Department of Science and Technology, Pratt Institute, 1899-1902; present position since 1902.

EDWIN F. CODDINGTON.....39 West Eleventh Avenue
Acting Assistant Professor of Mathematics

C. E., Ohio State University, 1896; M. Sc., 1897; Ph. D., University of Berlin, 1902; Emerson McMillin Fellow in Astronomy, Ohio State University, 1896-'97; Fellow in Astronomy, Lick Observatory, University of California, 1897-1900; Student in University of Berlin, Germany, 1900-'02; present position since 1902.

THOMAS HERBERT DICKINSON.....244 West Tenth Avenue
Assistant Professor of Rhetoric and English Language

B. Ph., Ohio State University, 1899; A. M., Columbia University, 1900; Professor of Oratory, Baylor University, Waco, Texas, 1901-'02; present position since 1902.

BURT BIDWELL HERRICK.....167 Tenth Avenue
Instructor in Cheese Making

Present position since 1898.

WILLIAM HENRY RENCK.....1568 Neil Avenue
Instructor in Pattern Making and Founding

Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops, O. S. U., 1899; present position since 1900.

CHARLES PHILIP CROWE.....971 Highland Street
Instructor in Forging

Student, Ohio Business College, Delaware, Ohio; Lebanon Normal School, Lebanon, Ohio; Teacher in Public Schools of Delaware and Union Counties, two years; Forge shop experience, seven years; Manufacturer of Steel Forgings and Springs, six years; Assistant in Industrial Arts and Forge Master, O. S. U., 1899; present position since 1900.

ARTHUR ERNEST DAVIES.....420 Fifteenth Avenue
Instructor in Philosophy

Student in Owen's College, Manchester, England, and University College, London, 1884-'88; B. D., Yale Divinity School, 1891; Ph. D., Yale University, 1898; present position since 1900.

†ALBERT EARL VINSON.....134 West Ninth Avenue
Instructor in Agricultural Chemistry

B. Sc., Ohio State University, 1901; Instructor in Chemistry, Y. M. C. A., Dayton, Ohio, 1895; Assistant in Agricultural Chemistry, Ohio State University, 1896-1901; present position since 1901.

THOMAS KENYON LEWIS.....1337 Summit Street
Instructor in Drawing

B. Sc., Ohio State University, 1894; Graduate Student, Ohio State University, 1894-'95; summer of 1897 and summer of 1898 at Cincinnati Art Academy; Assistant in Drawing, 1894-1901; present position since 1901.

SILAS MARTIN.....317 Fifteenth Avenue
Instructor in Drawing

Studied Art with J. H. Witt, E. F. Andrews and Homier; Private Teacher in Art for twenty years; Assistant in Drawing, 1899-1901; present position since 1901.

JOSEPH HENRY VOSSKUEHLER.....54 West Tenth Avenue
Instructor in Drawing

M. E., Ohio State University, 1900; Assistant in Drawing Department two years preceding graduation; Draftsman Stilwell-Bierce-Smith-Vaile Co., Dayton, Ohio, 1891-1900; Head of the Department of Drawing and Instructor in Mathematics, Miller Manual Labor School, Virginia, 1900-'01; present position since 1901.

A. V. BLEININGER.....116 West Ninth Avenue
Instructor in Ceramics

B. S. (Chemistry), 1901; Akron Paving Brick Co., 1890-'92; Cleveland Vitrified Pressed Brick Co., 1892-'95; Correspondent of "The Clay Worker," in Germany, 1895; Laboratory Assistant in Ceramics, 1898-99; Ohio Mining and Manufacturing Co., Shawnee, Ohio, summers 1898 and 1899; Editor American Ceramics Society's Translation of Seger's *Gesammelte Schriften*, 1900-'02; Assistant on Ohio Geological Survey, 1900 and 1901; present position since 1901.

BERTHOLD AUGUST EISENLOHR.....388 West Eighth Avenue
Instructor in Germanic Languages

B. Ph., Ohio State University, 1898; Teacher of German and Physics, Portsmouth (Ohio) High School, 1892-'96; Assistant in German, Ohio State University, 1896-'97; Instructor in Columbus Latin School, 1897-'98; Instructor in Germanic Languages, Indiana University, 1900-'01; present position since 1901.

S. E. RASOR.....
Instructor in Mathematics

B. Sc., Ohio State University, 1898; M. A., Ohio State University, 1902; Fellow in Mathematics, Ohio State University, 1898-'99; Professor of Mathematics, Amity College, Iowa, 1899-1900; present position since 1901.

EDWARD EVERETT SOMMERMEIR.....1590 Neil Avenue
Instructor in Metallurgy and Mineralogy

G. Ph., Ohio State University, 1898; Student Laboratory Assistant in Chemistry, 1897-'98; Assistant in Metallurgy and Mineralogy, 1898-1901; Chemical Assistant, Ohio Geological Survey since 1901; present position since 1901.

DON CARLOS HUDDLESON.....450 West Seventh Avenue
Instructor in Physical Education

G. Ph., Ohio State University, 1897; Medical Student, 1897; Summer School of Physical Training, Chautauqua, 1898; Assistant in Gymnasium, 1898-1901; present position since 1901.

MERRITT FINLEY MILLER.....252 West Eighth Avenue
Instructor in Agronomy

B. Sc., Ohio State University, 1900; M. S. A., Cornell University, 1901; Assistant in Bureau of Soils, United States Department of Agriculture, July 1, 1901, to January 1, 1902; present position since January 1, 1902.

FRANK RUHLEN.....University Grounds
Instructor in Zootechny

B. Sc., Ohio State University, 1896; Assistant in Agriculture, Ohio State University, 1898-1902; present position since 1902.

†Absent on leave.

- DELBERT ALONZO CROWNER.....West Jefferson, Ohio
Instructor in Butter Making
B. Sc., Ohio State University, 1896; present position since 1902.
- MELVIN DRESBACH.....236 West Eighth Avenue
Instructor in Anatomy and Physiology
B. Sc., Ohio State University; M. Sc., Ohio State University, 1899; Assistant in Anatomy and Physiology, 1899-1902; M. D., Ohio Medical University, 1903; present position since 1902.
- RUDOLPH HIRSCH.....1060 South Front Street
Instructor in Agricultural Chemistry
B. Sc., Ohio State University, 1901; Assistant in Agricultural Chemistry, 1901-'02; present position since 1902.
- GEORGE WASHINGTON RIGHTMIRE.....1528 Worthington Street
Instructor in American History and Political Science
B. Ph., Ohio State University, 1895; A. M., Ohio State University, 1898; Teacher, North High School, Columbus, 1895-1902; present position since 1902.
- EDGAR HOLMES McNEAL.....1340 Highland Street
Instructor in European History
A. B., University of Chicago, 1896; Ph. D., University of Chicago, 1902; present position since 1902.
- EDWARD DAVENPORT HOWARD.....307 West Seventh Avenue
Instructor in Law
LL. M., Ohio State University, 1896.
- H. DIEDRICH BRUNING.....786 Oak Street
Instructor in Civil Engineering
C. E., Ohio State University, 1896; on re-survey C. & M. Ry., 1896-'97; in Street and Sewer Department, City of Columbus, 1897; Assistant on Engineering Corps P., C. & St. L. Ry., 1897-1900; Assistant Engineer P., C. & St. L. Ry., 1900-'03; present position since 1903.
- HARRIET TOWNSHEND.....53 West Eleventh Avenue
Assistant in Library
Present position since September, 1895.
- MAUD DOROTHY JEFFREY.....1251 Neil Avenue
Assistant in Library
B. Ph., Ohio State University, 1895; Student of Library Science, Ohio State University, 1895-'96; Student of Library Science, Amherst, summer of 1897; present position since September, 1896.
- GERTRUDE STOWELL KELLCOTT.....1332 Highland Street
Assistant in Library
Student, Ohio State University, 1888-'95; Student of Library Science, Ohio State University, 1895-'96; Student of Library Science, Amherst, summer of 1897; present position since September, 1896.
- CLAUDE B. GUITTARD.....80 McMillen Avenue
Assistant in Library
Student in Ohio State University, 1892-'96; Assistant in Ohio State Library, 1897-'98; Student in Library Science, Washington, D. C., summer of 1899; present position since November, 1898.
- WILLIAM L. DAVIES.....47 West Eighth Avenue
Assistant in Civil Engineering
- SARAH TRACY BARROWS.....85 West Tenth Avenue
Assistant in Germanic Languages and Literatures
B. L., Iowa State College, 1891; M. L., Cornell University, 1893; Student in the Lehrerinnen Seminar, Hanover, Germany, 1896-'97; Teacher of German, Columbus North High School, 1897-1903; present position since 1901.
- MARION WILSON MUMMA.....47 West Tenth Avenue
Assistant in Chemistry
B. Sc., Ohio State University, 1901; Teacher of Science, High School, New Philadelphia, Ohio, 1901-'02; present position since 1902.

LOUIS BRYANT TUCKERMAN, JR.....1451 Worthington Street
Assistant in Physics,

A. B., Adelbert College, 1901; Scholar in Physics, University of Nebraska, 1901-'02; present position since 1902.

HARRY WILBUR BROWN.....1340 Fair Avenue
Assistant in Clinic

D. V. M., Ohio State University, 1902.

EDWARD NATHAN WEBB.....144 West Ninth Avenue
Assistant in Chemistry

B. Sc., Ohio State University, 1902.

HERMINE DE NAGY.....1332 Highland Street
Assistant in French

MARTHA HARTFORD.....161 West Tenth Avenue
Assistant in Library

B. Ph., Ohio State University, 1902; Student in Library Science, Ohio State University, 1901-'02; present position since 1902.

RAYMOND JESSE SEYMOUR.....76 West Third Avenue
Assistant in Anatomy and Physiology

B. Sc., Ohio State University, 1900; M. Sc., Tufts College, 1901; present position since 1902.

BENJAMIN FRANKLIN MAAG.....162 King Avenue
Assistant in Astronomy

B. Ph., Wooster University, 1893; M. Sc., Ohio State University, 1899; Teacher in High School, 1894-'97, 1900-'02; Fellow in Astronomy, Ohio State University, 1898-'99; present position since 1902.

OTTO EMERY JENNINGS.....University Grounds
Assistant in Botany

JOHN SATTERLEE TIDBALL.....35 Price Street
Assistant in Architecture and Drawing

B. S., Cornell University, 1880; Student, Art Students' League, New York City; Assistant in Architecture and Drawing, Ohio State University, 1902-'03; present position since 1903.

WILLIAM C. MILLS.....78 West Tenth Avenue
Curator of Archaeology

B. Sc. (H. and F.), Ohio State University, 1898; M. Sc., O. S. U., 1902; Curator and Librarian of the Ohio State Archaeological and Historical Society; Museum and Library, Page Hall, O. S. U.; Librarian Ohio Academy of Science, Library, Page Hall, O. S. U.

CLARA CONVERSE EWALT.....1382 East Long Street
Fellow in Rhetoric and English Language

B. Ph., Ohio State University, 1901.

JAMES GLOSSBRENNER SANDERS.....1610 Highland Street
Fellow in Botany

Ph. B. Otterbein University.

HARRIET GRISWOLD BURR.....1454 Highland Street
Fellow in Botany

B. A., Ohio State University, 1901.

LLOYD YOST.....218 West Eighth Avenue
Fellow in Mechanical Engineering

M. E., Ohio State University, 1902.

ERVIN G. BAILEY.....47 Tenth Avenue
Fellow in Rhetoric and English Language

M. E., Ohio State University, 1903.

- GILBERT PENNOCK.....80 Woodruff Avenue
Fellow in Experimental Engineering
B. A., Antioch College, 1902.
- OTTO H. SWEZEY.....377 King Avenue
Fellow in Zoology and Entomology
B. A., Lake Forest University, 1896; M. Sc., Northwestern University, 1897; Fellow in Zoology, Northwestern University, 1896-'98; Instructor in Biology, Academy of Northwestern University, 1898-1902.
- CATHERINE EMILY ANDREWS.....1095 North High Street
Fellow in Chemistry
B. A., Wellesley College, 1901.
- †CHARLES ETHELBERT STARLIN.....
Fellow in Chemistry
- FRANK H. MIESSE.....201 West Eleventh Avenue
Fellow in Economics and Sociology
B. Ph., Ohio State University, 1903.
- FREDERICK JOHN MUIRIE.....1574 Worthington Street
Fellow in Rhetoric
B. A., Ohio State University, 1902.
- J. C. CONE.....939 Wilson Avenue
Fellow in Library
- WINFRED FORREST COOVER.....1456 Hunter Street
Fellow in Chemistry
A. B., Otterbein University, 1900.
- JAMES McOWEN.....University Grounds
Florist

CHANGES, 1903-1904

RESIGNED

Professor Paul Fischer, Assistant Professor Herrick C. Allen, Assistant Professor John D. Batchelder, Assistant Reference Librarian F. A. Bohn, Assistant Fred J. Tyler, Fellow Grace L. Pitts, Fellow Anna E. Williams, Fellow C. C. Eckhardt.

APPOINTMENTS

EDGAR S. INGRAHAM.....	Assistant Professor of Romance Languages
F. E. MANGOLD.....	Assistant in the Dairy Laboratory
HARLAN H. YORK.....	Fellow in Botany
JAMES GLOSSBRENNER SANDERS.....	Fellow in Zoology and Entomology
JAMES ANDERSON BEER.....	Fellow in Anatomy and Physiology
JOHN ANDERSON WILKINSON.....	Fellow in Chemistry
C. G. STEWART.....	Fellow in Chemistry
MARY A. MOLLOY.....	Fellow in Rhetoric and English Language

CHANGES IN TITLES

1903-1904

SEPTIMUS SISSON,	Associate Professor of Veterinary Medicine Professor of Veterinary Medicine
CLARA MAUD BERRYMAN,	Director of Physical Education for Women Director and Associate Professor of Physical Education for Women
RUDOLPH HIRSCH,	Assistant in Agricultural Chemistry Instructor in Agricultural Chemistry
JOHN SATTERLEE TIDBALL,	Assistant in Architecture and Drawing Instructor in Architecture and Drawing
CATHERINE EMILY ANDREWS,	Fellow in Chemistry Assistant in Chemistry
RAYMOND JESSE SEYMOUR,	Fellow in Anatomy and Physiology Assistant in Anatomy and Physiology

Standing Committees of the General Faculty

Committee on Amusements and Receptions:

PROFESSOR KNIGHT, *Chairman*,
 PROFESSOR J. R. SMITH,
 PROFESSOR COLE,
 PRESIDENT THOMPSON.

Appointment Committee:

PRESIDENT THOMPSON, *Chairman*,
 PROFESSOR KNIGHT,
 PROFESSOR DERBY,
 PROFESSOR MCPHERSON,
 PROFESSOR MAJOR,
 PROFESSOR THOMAS,
 PROFESSOR DENNEY.

Athletic Board:

PROFESSOR KAUFFMAN (for three years),
 PROFESSOR THOMAS (for two years),
 PROFESSOR BLEILE (for one year).

Committee on Catalogue and Time Schedule:

PRESIDENT THOMPSON, *Chairman*,
 PROFESSOR SIEBERT,
 PROFESSOR BOHANNAN.

Committee on Commencement:

PROFESSOR BOWNOCKER, *Chairman*,
 PROFESSOR PAGE,
 PROFESSOR MORREY,
 PRESIDENT THOMPSON.

Debate and Oratory Council:

ASSISTANT PROFESSOR DICKINSON,
 PROFESSOR DENNEY,
 PROFESSOR KNIGHT,
 PROFESSOR CLARK,
 PROFESSOR SCOTT,
 PROFESSOR HUNTER.

Committee on Diplomas:

PROFESSOR BRADFORD.

High School Committee:

PRESIDENT THOMPSON, *Chairman*,
 PROFESSOR DENNEY,
 PROFESSOR BOHANNAN,
 PROFESSOR KNIGHT,
 PROFESSOR MAJOR,
 PROFESSOR MCPHERSON,
 PROFESSOR DERBY,
 W. W. BOYD.

Library Council:

PRESIDENT THOMPSON, *Chairman*,
PROFESSOR HUNT,
PROFESSOR DENNEY,
PROFESSOR ORTON,
PROFESSOR HUNTER.
PROFESSOR KAUFFMAN,
PROFESSOR WHITE.

Committee on Student Publications:

PROFESSOR J. R. SMITH, *Chairman*,
PROFESSOR BARROWS,
PROFESSOR CALDWELL.

Committee on Rules:

PROFESSOR SIEBERT, *Chairman*,
PROFESSOR HUNT,
PROFESSOR DENNEY,
PROFESSOR ORTON,
PROFESSOR HUNTER.
PROFESSOR KAUFFMAN,
PROFESSOR WHITE.

Lantern Board:

PROFESSOR DENNEY,
PROFESSOR COLE.

THE UNIVERSITY

THE UNIVERSITY

OHIO STATE UNIVERSITY

LOCATION.

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and forty-five acres, bounded east and west by High street and the Olentangy river, respectively. The western portion, about 235 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science. The eastern portion is occupied by the principal University buildings, campus, athletic and drill grounds, a park-like meadow and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower beds; and are so managed as to illustrate the instruction in Botany, Horticulture, Forestry, Landscape Gardening and Floriculture.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds or the athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townshend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

HISTORY.

The land grant made by the United States under an act approved by President Lincoln, July 2, 1862, provided that there should be granted to each State an amount of public land equal to thirty thousand acres for each Senator and Representative to which the State was entitled by the apportionment of the census of 1860. The proceeds under this act were to constitute a perpetual fund the capital of which was to remain forever undiminished and the interest of the same was to be inviolably applied by each State which should take and claim the benefits of the act to the endowment, support and maintenance of at least one "college where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

Governor Tod, in November, 1862, brought the subject before the State Board of Agriculture and later to the attention of the Legislature. In January, 1864, Hon. Columbus Delano introduced a bill accepting the grant. This became a law February 9, 1864, and pledged the faith of the State to the performance of all the conditions and provisions contained therein. In 1866, an act introduced by Hon. J. T. Brooks, was passed, which provided for the establishment of the Ohio Agricultural and Mechanical College, but the provisions were not carried into effect, and a second act introduced by Hon. R. P. Cannon was passed in 1870 entitled, "An act to establish and maintain an Agricultural and Mechanical College in Ohio." Under the provisions of this act the institution was located in Columbus and the Board proceeded to the organization of the college and the election of a faculty of instruction, and the institution was opened for the reception of students on the seventeenth day of September, 1873.

In 1878 the legislature passed "An act to reorganize and change the name of the Ohio Agricultural and Mechanical College and to repeal certain acts therein mentioned." The act provided that the institution should be thereafter designated as "The Ohio State University." Up to this time but one

appropriation had been made by the State for the support of the institution. With the reorganization came the larger and broader view of the State's relation to public education, and since that time the Ohio State University has shared with other public educational institutions a more generous support by the State.

The governing body of the institution is a Board of Trustees, appointed by the Governor of the State and confirmed by the Senate, for terms of seven years, as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by special appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture, engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

ORGANIZATION.

THE UNIVERSITY EMBRACES SIX COLLEGES.

The College of Agriculture and Domestic Science.

The College of Arts, Philosophy and Science.

The College of Engineering.

The College of Law.

The College of Pharmacy.

The College of Veterinary Medicine.

Both graduate and undergraduate courses are included in all the Colleges of the University.

THE COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE:

The Four Years' Course in Agriculture.

The Course in Horticulture and Forestry.

The Four Years' Course in Agriculture.

The Four Years' Course in Domestic Economy.

The Course in Dairying.

The Short Course in Agriculture.

The Short Course in Domestic Economy.

THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE:

The Graduate School.

The Undergraduate Department.

THE COLLEGE OF ENGINEERING

The Course in Architecture.

The Course in Ceramics.

The Course in Chemical Engineering.

The Course in Civil Engineering.

The Course in Electrical Engineering.

The Course in Industrial Arts.

The Course in Manual Training.

The Course in Mechanical Engineering.

The Course in Mining Engineering.

The Short Course in Clay Working.

The Short Course in Industrial Arts.

The Short Course in Mining.

THE COLLEGE OF LAW:

The Graduate Course.

The Three Years' Course.

THE COLLEGE OF PHARMACY:

The Four Years' Course in Pharmacy.
The Short Course in Pharmacy.

THE COLLEGE OF VETERINARY MEDICINE:

A Three Years' Course.

Each College is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of the students in that College.

BUILDINGS.

The University has fifteen buildings devoted to instruction, one Boiler House, one Power House, two Dormitories, seven residences and some farm buildings. These buildings represent an investment for construction of about nine hundred thousand dollars. The equipment and apparatus amount to about three hundred thousand dollars. The land now occupied as a site with the farm is valued at one million five hundred thousand dollars. A new building for the College of Engineering and one for the College of Veterinary Medicine are in process of erection and the funds are provided for a new building for the Department of Physics.

UNIVERSITY HALL contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y. M. C. A. and Y. W. C. A. room, the Young Woman's League room and class rooms and laboratories for the departments of Economics, English Literature, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy, Physics, Rhetoric and English Language, and Romance Languages. An electric passenger elevator connects all floors.

MECHANICAL HALL contains a room fitted up with cases for the care of models, samples of materials, instruments of precision, etc.; a room for instruction in experimental engineering and mechanism and draughting; and the steam, hydraulic, gas and pneumatic engineering and testing laboratories.

BOTANICAL HALL has on the first floor the lecture room of the Department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

ELECTRICAL HALL devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

CHEMICAL HALL is now occupied by the departments of Chemistry, Mining and Metallurgy and Pharmacy.

The Department of Chemistry occupies the larger portion. The main lecture room is situated on the second floor and has a seating capacity of one hundred and seventy-five persons. There are six main laboratories; two for students in elementary chemistry and qualitative analysis, accommodating five hundred; one for analytical chemistry with desks for sixty-five; one for organic chemistry and one for research work, each with accommodations for twenty; one for physical chemistry. In addition to these, there are offices, balance rooms, private laboratories and several smaller rooms used for combustion work, spectroscopic work and private investigations.

The Departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity for forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The Department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accommodation of the large geological collection of the University and for work and instruction in the depart-

ment of Geology. A portion of it is occupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professors' private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Ceramics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil and Mechanical Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The Department of Drawing occupies the third floor for instruction in mechanical drawing and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the Department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

VETERINARY LABORATORY BUILDING—The Veterinary Laboratory, a building with two stories and a basement, is the headquarters of the College of Veterinary Medicine. It will be completed by July 1, 1903, at a cost (with equipment) of about \$50,000. The building is especially designed for instruction in veterinary medicine and will be the largest and finest building of its kind in the Middle States. It is built of buff-colored pressed brick, trimmed with stone and with an imposing entrance of Bedford limestone. The windows are to be of plate glass; the roof of dark red tile. As the basement of this building is fourteen feet high and provided with large windows it constitutes practically the first floor. It is approached from the rear at the ground level. In planning the building every effort has been made to have its construction conform to the modern ideas of sanitation.

THE EMERSON McMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large, well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced." During the summer of 1902 the University added to the building a lecture room, comparator room, instrument shop, spectroscopic laboratory, a zenith telescope room and theodolite room.

TOWNSHEND HALL is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the Department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students. At the extreme south end of this floor is a large laboratory for student work in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west

side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all appliances for showing lantern slides of live stock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lavatory, butter-making room, cheese-making room, two cheese-curing rooms, and an instructor's room.

In the south end of the basement is a live stock room about forty feet square. One-third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging live stock. Connected with this is a room fitted with stalls for the temporary accommodation of live stock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the Department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also on this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townshend Society, designed to seat about two hundred persons.

BIOLOGICAL HALL is designed for the special accommodation of the Departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

THE GYMNASIUM AND ARMORY was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitors' gallery seating about seven hundred persons. At the northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the level with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room.

PAGE HALL, occupied by the College of Law, is a handsome building of buff Bedford limestone and gray speckled brick, the main front being adorned with four Ionic columns about three feet in diameter and twenty-six feet high. The basement rooms are intended to be used as class rooms when the demands of the college require additional space. The first story is utilized for class and lecture rooms, seven in number, with seating accommodations for five

hundred students, and for the offices of the dean, the secretary and the faculty. Through the large central hallway a double staircase leads to the second floor, which provides two large reading rooms, lighted from above. Between the two reading rooms is a fireproof room for the book stacks, which are designed ultimately to give shelving space to 50,000 volumes.

A separate reading room for graduate students and a conversation room are provided on this floor.

THE ENGINEERING BUILDING will be devoted to Civil Engineering and Architecture and Drawing. The offices of the dean and secretary of the College of Engineering will also be located there. The building is two stories high, with basement above grade line. It consists of a main structure with a frontage of 217 feet and two short wings in the rear. It has been designed and constructed with a view to adding a third wing and considerably extending the two present wings.

The Department of Civil Engineering will occupy the eastern part of the building. Their space will include four offices, three commodious lecture rooms, three large drawing rooms, a room for special drawing work, a room for thesis work, charts, library, etc., a well equipped cement laboratory, an instrument room, and a room for camp storage and workshop purposes.

The Department of Architecture and Drawing will occupy the western part of the building. They will be provided with three offices, three lecture rooms, six drawing rooms, all of large size, two photographic work rooms, one large dark room, a blue print room, with electric light for printing and another for washing and drying prints, and an architectural laboratory.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are eight dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the eighth is the farm house.

LABORATORIES AND EQUIPMENT.

AGRICULTURE.

The equipment of this department may be divided along three general lines—The Plant, The Museum and the Illustrative Materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn and several small buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horse are kept and used in the farm work. The department manages a milk dairy, having a herd of about forty cows, composed of pure bred and grade Jerseys and Shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a roof cellar, a workshop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton, forage plants and foodstuffs. Milling and other processes are illustrated by samples of the various products of manufacture.

The Museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of live stock, farm machinery, fences, buildings, etc. The department has and uses constantly in the class room a Beseler double oxygen-ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this department, there is in the general library a fairly good collection of books and periodicals devoted to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (See also BUILDINGS—*Townshend Hall*.)

ARCHITECTURE AND DRAWING.

The department occupies the entire third floor and one room in the basement of Hayes Hall, consisting of: 1st. A large studio 35x80 feet for free hand drawing, ornament drawing and pen drawing; provided with adjustable tilting tables and easels and lockers. 2d. A large room 40x85 feet for architectural designing and mechanical drawing, provided with 95 O. S. U. drawing tables (30x36 inch tops) and lockers. 3d. Color studio, provided with easels and material for still-life work in oil or water color, and lockers. 4th. Clay modeling studio 26x32 feet, provided with modeling stands, casting table, moisture box, modeling box, modeling tools, a stove and vent hood for gelatine molds and lockers. 5th. For photography, a well arranged and equipped dark room and work room provided with printing apparatus, copying cameras, sight view cameras, long, short and tele-photographic lenses, lens shutters and an excellent outfit for photo-micrography. A lecture room equipped with stereopticon lantern is available. In addition to the above, the department possesses models in plaster and wood illustrating the constructive and ornamental forms of the different styles of architecture, a collection of architectural photographs and lantern slides, a collection of architectural drawings and specifications of erected structures, a collection of plates of architectural forms and ornament, instruments for experimental work in heating and ventilating, such as anemometers, hygrometers, carbonic acid tester and thermometers. The heating apparatus of the several buildings provides valuable materials for this work. For drawing and color work the department possesses a collection of good specimens of work, wooden models of geometric forms, plaster casts of fruit, flowers and the antique and material for still-life work. For mechanical drawing a set of Schroeder models and a collection of shop drawings and facilities for blue-printing.

ASTRONOMY.

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays; a position micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmuller; a sidereal clock by Clemens Riefler, of Munich; a comparator by Carl Zeiss; a four-inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instruments; a zenith telescope, theodolite with twelve-inch horizontal and vertical circles and two smaller theodolites by Houghton & Simms.

The equipment of the spectroscopic laboratory consists of a five-inch concave grating, with Rowland's form of mounting by Brashear, a large spectrometer, two comparators, one by Zeiss and one by Gartner, a heliostat by Gaertner, donated to the observatory by Mr. J. F. Stone, a 110-volt storage battery, gas engine, dynamo and large induction coil. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

BACTERIOLOGY.

The Department of Bacteriology will occupy a portion of the new Veterinary Laboratory Building. There will be a laboratory on the second floor

accommodating about thirty students, another in the basement with places for fifteen men, a private laboratory and office, a room for experimental animals in the attic, one for inoculated animals in the basement, and two incubator rooms. These rooms will each be equipped with the necessary incubators, hot air and steam sterilizers, autoclaves, microscopes, microtomes, etc., for instruction, with facilities for advanced and original work. It is intended that the furnishings shall be of the latest and best type, so that not only elementary teaching but also research may be carried on under the most favorable circumstances.

BOTANY.

The general Botanical Laboratory occupies a part of the second floor of Botanical Hall. It is 23x33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows, suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes; also charts and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also MUSEUM—*The Botanical Museum*; and BUILDINGS—*Botanical Hall*.)

CHEMISTRY.

The laboratories of the department accommodate six hundred students. Each laboratory is equipped with all the necessary conveniences—water, gas, electric lights, distilled water piped from a large still in the attic, steam ovens, automatic air blasts, suction pumps, etc. The department is liberally supplied with the best apparatus and materials for both lecture room and laboratory work. Each student has his own desk with drawers and locker. All supplies are procured from the chemical store room, which has always on hand a complete stock of all necessary materials. (See also BUILDINGS—*Chemical Hall*.)

CIVIL ENGINEERING.

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30x36 inch top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lantern and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; sets of tracings of standard structures, from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented or made by students of the department.

CLAY-WORKING AND CERAMICS.

The University was the first and for some time the only institution in the United States offering facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. In the last two years other institutions have entered this field. The facilities of the department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order

with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade, from earthen wares to porcelain. The machinery is of the latest type and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished article by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer pipe, stoneware or pottery can be burned. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle furnace for testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has also been provided. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German, but containing a few English and French works, and the trade periodicals. (See also BUILDINGS—Orton Hall.)

The facilities of the department for study in the field of cement and mortar materials comprise, in addition to the foregoing plant, much of which is especially well-suited to this purpose, the following special apparatus: 1st. An improved dry-ball mill, of chilled iron, for grinding the raw material together, and for grinding the cement clinker. 2d. A small cupola, fired with coke and using air blast, for the vitrification of the refractory silicates used. 3d. A specially constructed flat-hearth furnace lined with magnesite and fired with oil and compressed air, for burning cement where the process needs to be interrupted frequently to determine how far vitrification has progressed. 4th. Access to the complete and well-appointed cement testing laboratory of the Department of Civil Engineering.

These facilities permit the department to offer exceptional opportunities to any who wish to specialize in this important field of manufacture. (See also BUILDINGS—Orton Hall.)

DOMESTIC ECONOMY.

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be thorough and scientific.

ECONOMICS AND SOCIOLOGY.

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business paper; also collections of coins illustrative of various periods in our monetary history, foreign coins and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent. in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

ELECTRICAL ENGINEERING.

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes, from 40 horse power down, aggregating over 200 horse power. These

include direct and alternating current generators, polyphase motors, arc and incandescent lighting generators, railway and station motors and unipolar dynamo. The latter, with an alternating current generator and a 2-phase motor, were built by the students, it being the policy of the department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding, built at the University. Arc lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory, with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University power plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

GEOLOGY.

The University is able to present unusual advantages for the study of geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories. (See also *MUSEUMS the Geological Museum; and BUILDINGS—Orton Hall.*)

HORTICULTURE AND FORESTRY.

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing all the best varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, currant and gooseberry; (5) a vegetable garden with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc.; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also *MUSEUMS—the Botanical Museum; and BUILDINGS—Horticultural Hall.*)

THE LAKE LABORATORY.

The University maintains a Lake Laboratory at Sandusky during the summer vacation, which is designed to provide opportunity for investigation of the biology of the lake region, and for giving certain courses of instruction in the Departments of Botany, Zoology and Entomology.

Provision has been made for a new and commodious laboratory building capable of accommodating at least one hundred students and investigators, the construction of which will proceed as rapidly as possible, and it is expected to be fully ready for use at opening of this session.

It will be fully provided with tables, dark rooms, aquaria, etc., and supplied with microscopes and other apparatus from the University.

Boats, collecting apparatus, dredges, seines, etc., are well supplied, and special attention will be given to the methods of collecting and field work.

For further information write for special circular on Lake Laboratory.

MECHANICAL ENGINEERING.

The greater part of Mechanical Hall is devoted to laboratory purposes.

The South Laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The North Laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single and duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condensor. Pressure and vacuum gauges are calibrated. Indicator springs of five makers are tested, either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 1,200 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade and Pelton water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pilot tube are also used. Ericsson and Rider hot air engines are tested. A Rife hydraulic engine, a Humphreys ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

The Robinson experiment boiler gives unexcelled facilities both for laboratory exercises in the use, care and testing of steam boilers, and for the solution of original problems in this branch of engineering practice and research.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

The buildings of the power plant were completed in 1896, and, with their contents, form a model plant. The boiler room is 33 by 100 feet, and is equipped with five 150 horse power boilers, with Babcock and Wilcox chain grates and Murphy automatic stoker. There are also coal and ash conveyors for the whole plant. At one end of the boiler room is the coal room and at the other the pit for the hot well, from which runs the tunnel (about three-fourths mile in length) to the buildings of the University, carrying heat, gas and water pipes and power, light and other wires.

Near the boiler house is the power house, 40 by 60 feet. The power generating plant consists of a 70 horse power McEwen compound engine, belted to a 60 kilowatt 2-phase Westinghouse alternator, and a 200 horse power Watertown compound, directly connected to a 125 kilowatt 2-phase generator. These occupy the main floor, together with a complete marble switchboard, with ammeters, voltmeters, wattmeters, static ground detectors, etc. A ten-ton traveling crane is available for handling the machinery in this room.

In the basement are condensers, which get their water from a large cooling reservoir at the side of the building. Here are also the transformers that

convert the current to be used in the motors scattered over the campus, from 110 volts, at which it is generated, to 400 volts, at which it is transmitted.

There are installed on the campus over eighteen hundred incandescent lamps, twenty-four arc lamps and about 250 horse power in motors. The electric plant is, for the most part, of the Westinghouse system. The buildings are of brick. Nearly all of the University buildings are heated by steam from this plant. The total cost of the plant for generation of power, light and heat, and for its transmission to the buildings, has been something over \$100,000.

In order to facilitate experimental and research work in the direction of combustion of fuels under variable conditions as applied to steam generation, there was installed during the past year in the University boiler house, a most complete experiment boiler outfit. This equipment was furnished by Stillman W. Robinson, Emeritus Professor of Mechanical Engineering, who not only established the Department of Mechanical Engineering at Ohio State University and for many years was at its head, but was the originator of the first mechanical engineering department in this country connected with a state university, that at Champaign, Ill.

A Babcock & Wilcox boiler of 107 horse power, built for a working pressure of 200 pounds, with hand-fired furnace of the oven fire-brick type, is the principle of the system. The products of combustion, after passing the boiler, can be conducted direct to the open air by the chimney or otherwise, or into a Green's fuel economizer, where its 570 square feet of heating surface transfers heat to the feed water on its way to the boiler. The heat of the escaping gases can still further be absorbed by an air heater having 1,330 square feet of heating surface. The heat thus taken up is transmitted to the air employed in the fuel combustion.

For promoting combustion, natural draft may be employed, or when greater intensity of draft is desired above that produced by the chimney, the latter can be cut out and a Sturtevant induced draft fan, driven by a direct connected engine, brought into action. In combination with either mechanical, induced or natural draft, forced draft produced by a belt-driven Sturtevant fan may be employed, and the air forced into the ash pit may be taken from the boiler room direct, or by a system of underground flues be compelled to pass through the air heater on its way to the fan.

Weighing and collection tanks, in conjunction with a steam pump, supply the boiler with known quantities of water which flows by the way of the economizer or to the boiler direct. In this feed water system is a Hayden's feed water purifier with live steam heater, which may be used in conjunction with the economizer.

Draft intensity and temperatures are determined at many points throughout the system; a Le Chatelier pyrometer being used for high, and mercurial pyrometers for low temperatures.

An Arndt's econometer indicates continuously the percentage of carbon dioxide in the escaping gases, while at the same time the Orsat's apparatus is used for giving absolute composition. The composition of the fuels employed and their calorific values are determined in the Department of Metallurgy.

The plant as a whole admits of many combinations, thereby being able to meet almost every condition in practice.

METALLURGY.

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A large room in the basement is fitted for gold and silver assaying, with improved muffle and melting furnaces, sampling apparatus and assay balances.

The lecture room in metallurgy has a projection lantern with a large collection of views of machines, mines and furnaces. There is a photographic room with blue-printing facilities, where students learn to make copies of drawings used in illustrating the lectures.

A collection of minerals and rocks, with a large set of rock sections, is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determinative mineralogy. (See also BUILDINGS—*Chemical Hall*; and MUSEUMS—*The Geological Museum*.)

MINE ENGINEERING.

This department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation. There is a collection of models of mine machinery and supplies, to which additions are being made, which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught the making of maps, the platting of actual surface and underground surveys, the making of drawings, tracings and blue-prints. He is also taught proper methods of keeping notes and all records necessary to an efficient engineer's office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

There is a large collection of views of machines, mines and mine equipment for use in the projection lantern in the lecture room. A photographic room with blue-printing facilities is used by the students in making copies of their own drawings and those illustrating the lectures.

PHARMACY.

The Pharmacy Department occupies the west wing, first floor of Chemical Hall.

The apartments consist of a large general laboratory, a smaller laboratory for advanced students, a dispensing room, reading room, lecture room, private laboratory and the office of the Dean.

The main laboratory will accommodate fifty students. Each desk is equipped with a very complete set of apparatus for individual use and special appliances are provided for general use. This laboratory is well provided with hoods, drying closets, steam pans, distilling apparatus, percolating racks, mills, and indeed, everything necessary to conduct the ordinary operations of pharmacy.

The laboratory for advanced work is similarly provided except that the individual sets of apparatus vary according to the line of work being followed, and the apparatus for general use (as, for example, the balances) is of the highest degree of accuracy. This laboratory will accommodate about twenty students.

The dispensing room is a completely equipped and well stocked drug store. The prescription desks are large enough to permit several students to work at one time and a full complement of apparatus for the work of the dispensing counter is provided.

The prescription files are very complete and cover as far as possible the entire range of prescription practice.

In the reading room are kept the books of reference delonging to the department and such other books as may be drawn from the general library of the University for use during special investigation. Here also are to be found the pharmaceutical journals.

The lecture room is well supplied with apparatus and appliances for illustration and experiment. About the walls are arranged cases in which are kept sets of specimens illustrating processes of manufacture, specimens of rare, costly and curious drugs, and of official preparations. Here also is a complete set of specimens of original crude drugs arranged by number only, for practice in the "recognition of drugs." (See also BUILDINGS—Chemical Hall.)

PHYSICS.

The department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural colleges, is in possession of the department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a

break-circuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat; Meilani-Tyndall apparatus for radiant heat; standard thermometers by Paudin and others; Rutherford and Rowland, different gratings; Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Duboscq's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is *ex officio* State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the department.

PHYSIOLOGY.

The facilities provided for the study of anatomy, histology and physiology are excellent. The laboratory is supplied with skeleton, papier mache manikin and many models, including models of the eye, ear, larynx, etc. The apparatus of the department for work in physiology is of the best and most approved construction, and is adapted to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical re-agents; and for advanced work the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of an histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also BUILDINGS—*Biological Hall*.)

PSYCHOLOGY AND EDUCATION.

The psychological laboratory occupies three rooms on the fourth floor of University Hall, and is reasonably well equipped for work in physiological and experimental psychology and for research in related educational lines. For the study of motor processes and development the most improved form of ergograph with complete sets of myographic, chronographic, dynamometric and pneumatic recording appliances, has been provided. A complete outfit of apparatus for the study of sensation, memory and association makes it possible for students of education to acquire methods of exact observation of the various mental and motor processes involved in school work. Provision also has been made for work in comparative psychology.

SHOPWORK.

The shops occupy the north wing of Hayes Hall and afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each, and a large number of special tools for general use, twenty-three pattern-maker's turning lathes, with cupboards containing the necessary turning and pattern-making tools under each, an eight-foot pattern-maker's lathe with compound rest, a pony planer, a buzz planer, a circular rip and crosscut saw, a scroll saw, a 36-inch band saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and a punch, shear and bar cutter. The blast for the forges

is furnished through underground piping by a 45-inch Buffalo pressure blower, and the smoke is removed by a 55-inch Buffalo exhaust fan, overhead. Both of these fans are driven by a 15 horse power electric motor.

The foundry is equipped with a 24-inch Colliau cupola, the blast for which is furnished by a 30-inch Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core-making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30 horse power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work, with complete sets of tools; eight speed lathes, sixteen engine lathes, a Fox monitor turret lathe, two planers, two shapers, two milling machines, two upright drills, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, micrometers, and a great variety of special tools. (See also BUILDINGS—*Hayes Hall*.)

VETERINARY MEDICINE.

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stall for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs presented, but also the meat-producing animals from the barn, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also BUILDINGS—*The Veterinary Hospital—Biological Hall*.)

ZOOLOGY AND ENTOMOLOGY.

Instruction in this department is largely by the laboratory method, with lectures and use of text or reference books, the effort being to lead the student to observe and think for himself. The various courses are intended to provide instruction in the elements of the science, familiarity with methods of study and investigation, and opportunity for special research, involving field, laboratory, museum and library work. The adjacent fields, wood, lake and river; the various well equipped laboratories, extensive collections and libraries furnish excellent opportunities for every phase of the study.

The department occupies the first and third floors of the fine new Biological Hall, providing two lecture rooms, one general and five special laboratories, museums, offices for professor and assistants, besides room for storage, workshops, aquaria, cold-storage, photography, etc. The laboratory equipment includes microscopes, microtomes, incubators, injectors, etc., for most approved methods of work in morphology, embryology and neurology. The collections include a fine series of skeletons, a number of large mammals, series of the birds of Ohio, of the birds of North America, of Ohio fishes, of mollusks and especially rich collection of insects particularly in Odonata, Hemiptera and Diptera. (See also THE MUSEUMS—*The Zoological Museum, Biological Hall*.)

The Lake Laboratory maintained at Sandusky and open during the summer vacation offers courses of instruction and exceptional opportunities for original investigation in a very interesting and delightful locality. (See Lake Laboratory.)

THE MUSEUMS.

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

(a) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.

(b) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.

(c) The economic minerals of the state are also shown to excellent advantage in the museum. The coals, petroleum, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.

(d) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geological casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual specimens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y., and proves to be one of the largest in the country.

The museum also has a mounted skeleton of *Megalonyx jeffersonii*, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes county, Ohio, in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds, about 1,500 skins, representing very fully the North American fauna; a number of fine specimens of larger animals, moose, hippopotamus, deer, tiger, pecary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborne's private collection of Hemiptera is deposited in the Department and available to students for comparison and study.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the general University herbariums, and the State herbarium, over 30,000 mounted sheets, also Professor Kellerman's private herbarium of over 20,000 specimens reposit for use in the Botanical department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fabrics, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILDINGS—Townshend Hall.

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Equipment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHAEOLOGICAL COLLECTION. Page Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in various parts of the State during the summers of 1894, 1895 and 1896, and as a result the contents of more than eighty mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and, by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

LIBRARIES.

THE UNIVERSITY LIBRARY.

The University Library, containing about fifty thousand volumes, is located in the east end of Orton Hall. The system of department libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 a. m. until 9:30 p. m.; Saturday from 7:30 a. m. until 4 p. m.

The management of the Library is vested in a Library Council, which is composed of the President, the Librarian and the Deans of the six colleges.

STATE LIBRARIES.

Students are privileged in being near the two State Libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

CITY LIBRARIES.

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and reference rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

SPECIAL LIBRARY IN ECONOMICS.

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade journals are received and filed regularly. The business men of Columbus have contributed over \$1,200 for the equipment of this commercial library.

SPECIAL LIBRARY IN ZOOLOGY AND ENTOMOLOGY.

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Prof. Kellicott which was generously donated to the Department. This has been increased by gifts of special papers by a number of the leading investigators of the country and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

AIDS TO MORAL AND RELIGIOUS CULTURE.

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. This association is directly affiliated with the work for young men directed by the college department of the State Y. M. C. A. work. Services are held weekly and voluntary classes for Bible study are successfully organized. The local association has a secretary who devotes his entire time to work among the young men. The management has rented a house at 136 West Tenth avenue as headquarters for the Association. It is hoped that in the near future a permanent home for the Association may be provided.

An equally commendable organization is the Y. W. C. A., affiliated with the State organization. Religious meetings are held regularly at noon on Tuesdays. Occasionally meetings for social purposes are held as provided for by the organization. Both of these organizations are worthy of public consideration.

New students are invited to write to the address below for a hand book of information concerning the University or for information concerning rooms, boarding or employment. Address J. H. Warner, Y. M. C. A. Secretary, 136 West Tenth avenue, Columbus, Ohio.

THE CONVOCATION.

At the opening of the year in September, 1900, the daily chapel exercises were abandoned. As a substitute for the short daily exercises an entire hour is now devoted to a convocation at which the president presides. In addition to devotional exercises an address is delivered upon some suitable topic. During this hour the libraries and laboratories are closed and no other University exercises occur. It is expected that the Faculty and students will attend. The hour is definitely fixed at ten o'clock on Wednesday of each week. The public is always welcome at the Convocation.

LITERARY AND OTHER SOCIETIES.

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the

Athenæan Literary Society, open to young men, was founded in the winter of 1896-'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Townshend Literary Society was established in 1883 as a technical society under the name of the Kirtland Agricultural Society. In 1894, the name Townshend was substituted. In 1898, the Society changed its constitution so as to admit any student of the University and thus became a literary rather than a technical society. It meets weekly in its commodious and well arranged society room in Townshend Hall.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed.

The Chemical Association, composed of the more advanced students and instructors in the Department of Chemistry and Pharmacy, has for its object the discussion of such subjects as are of importance to students of chemistry, special stress being placed on recent discoveries. The meetings are held semi-monthly and are of great interest. Both professors and students contribute to each program.

The Political Science Club is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported and current questions and publications in political science considered and discussed.

The Engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Organic Evolution Club was organized in the winter of 1896-97 by those students and members of the Faculty especially interested in the study of Evolution. The Zoological Department has a similar club known as the Journal Club.

The O. S. U. Dramatic Club was organized in 1893. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, the O. S. U. Mandolin and Guitar Club, the O. S. U. Banjo Club, the O. S. U. Orchestra, the O. S. U. Male Quartet and the University Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the possession of the University form a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club has for its purpose the promotion of art interests among the students and ex-students. Any one who is or has been connected with the University in any capacity is eligible to membership. The members meet once a week and sketch from the draped human figure. Twice a month the members present sketches illustrating some word, etc., previously selected. All work is criticised by members of the club for mutual benefit.

The English Club, composed of the instructors and advanced students of the English departments, holds bi-weekly meetings at which new books in current literature are discussed and papers on literary topics are presented.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

MILITARY SCIENCE AND PRACTICE.

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge

of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the College of Law, and such others as may be specially excused for physical disability or for having reached the age limit of twenty-five years, shall render two years of cadet service. Special students are required to take the cadet service. From the opening of the year until Thanksgiving recess cadet service is required four times a week; from Thanksgiving until Spring recess cadet service is required twice each week and gymnasium practice twice; from the Spring recess until the first of June cadet service is required four times each week. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their university work and the work of the department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officer's sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the department consist of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers' swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand rounds of blank cartridges for cadet rifles.

PHYSICAL EDUCATION.

The physical education is given by the director in charge, assisted by Miss Berryman, who has charge of the work for the young women. The large drill hall is used by the women in the forenoon and by the men in the afternoon.

The exercising floor, 80 x 150 feet, is thoroughly equipped with the best apparatus in duplicate. The running track is fourteen laps to the mile, with graded elevations at the curves to meet the requirements of the different rates of speed. The track is laid with felt an inch in thickness, three and a half feet wide and covered with rubber coated canvas.

The work is required for the first and second year students. The course consists of theoretical and practical work in the gymnasium, and includes calisthenics, light and heavy gymnastics, physiology of exercise, physical examinations and measurements. It is intended to give the student such a training in the methods of Physical Education that he may have a comprehensive knowledge of the subject.

A thorough physical examination of each student is made at the opening of the year, and the measurements are outlined on charts, so as to show the part below the normal development, for which special exercises suited to the health and physical condition of each individual will be suggested. These

charts are constructed from the accumulated data of several thousand measurements of college students. Experience demonstrates that the body, as well as the mind, is susceptible of right and wrong development. Every part of the body can be strengthened and increased and the relation of one part to another can also be changed so as to correct imperfections.

Class leaders who act as floor aids are selected from among those who show a proficiency in the work. These students are given a certificate of their appointments as Aids, and the letter A in scarlet, which they are entitled to wear on their gymnasium suits.

It is the aim of the department to secure health, vigor and such harmonious development of the body as will fit it to resist disease and prepare it for efficient service, both now and later in life.

The gymnasium is free to all students, but those desiring a locker will be charged a fee of one dollar a term.

OHIO FORESTRY BUREAU.

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

PRIZES.

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law, which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments.

FEES AND EXPENSES.

GENERAL CHARGES.

All term dues must be paid at the opening of each term as a condition of admission to classes.

INCIDENTAL FEE.—A charge of six dollars a term, eighteen dollars a year, is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

TUITION.—Tuition is free for all students except in the College of Law. The fees of the College of Law are \$30 per semester, including the usual incidental fee.

RETURN OF FEES.

The rules of the Trustees provide for the return of fees only in cases of prolonged illness or of unforeseen calamity.

LABORATORY FEES.

Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. First year students are also required to make a deposit of five dollars at the beginning of each term at the Chemical Store Room to cover the cost of laboratory supplies.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water. First year students are also required to make a deposit of five dollars at the beginning of each term at the Chemical Store Room to cover the cost of laboratory supplies. He is also required to buy his own supplies, as he needs them, at the general store room in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6, 42.....	\$10 00
Agriculture, 25, 22.....	5 00
Agriculture, 33.....	2 00
Agriculture, 18.....	1 00
Anatomy and Physiology, 4, 9, 11.....	5 00
Bacteriology, 1, 4, 5, 6.....	1 00
Botany, 3, 4, 6, 7, 8, 11, 12, 16, 17, 18, 19, 21, 22, 23.....	2 00
Botany, 24, 25, 27, 29.....	2 00
Ceramics, 1, 2, 3, 7.....	1 50
Ceramics, 9, 10, 11, 18.....	5 00
Chemistry, 1.....	1 00
Chemistry, 2, 3, 7, 8, 9, 12, 12a, 13, 15, 17, 20, 27, 29, 30b, 32, 33, 34.....	1 50
Domestic Science, 1, 2, 3, 4, 11, 12, 13.....	5 00
Domestic Science, 5, 6, 7, 8, 9.....	1 00
Drawing, 7.....	2 00
Elec. Engineering, 9, 11, 4 hrs. or more.....	7 00
Elec. Engineering, 7, 3 hrs. or less.....	5 00
Law when elected 5 hours or less, per semester.....	7 50
Metallurgy, 3, 5, 6.....	1 50
Mechanical Engineering, 12, 14, 15, 17, 24, 25, 27, 28, 29, 30, 35, 36.....	5 00
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18.....	1 50
Physics, 5, 6, 7, 9, 12, 13, 15, 3 hrs., \$5.00; over 3 hrs.....	7 00
Shopwork, 4 hrs. or less.....	5 00
Shopwork, 5 hrs. or more.....	7 00
Zoology and Entomology, 2, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 2 hrs., \$2.00; 3 hrs., \$3.00; over 3 hrs.....	5 00
Zoology and Entomology, 1, 3, 4, 7.....	1 00

LOCKER FEE.

A fee of one dollar a term is required from those who make use of a locker in the gymnasium.

CADET UNIFORM.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat) about fourteen dollars. It is quiet in pattern, and is designed to be worn in place of civilian dress.

GRADUATION FEE.

A fee of five dollars, to cover expense of graduation and diploma is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FEES FOR THE COLLEGE OF LAW.

INCIDENTAL FEE.—An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline and character of studies selected as other students in the University.

TUITION FEE.—In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students.

GRADUATE FEE.—A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE.—A fee of five dollars is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred or certificate delivered.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

AUDITOR'S FEE.

On presentation to the Bursar of the written consent of the head of a department, and on payment to the Bursar of an auditor's fee of one dollar, any person engaged in teaching is permitted to attend, in that department, any class or course (not to exceed three hours a week for one-half year) which is announced to be especially for teachers or those intending to teach.

ROOMS AND BOARD.

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students. Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and twenty-five cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

ESTIMATE OF EXPENSES.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses:

	Low	Average	High
Incidental fees	\$18 00	\$18 00	\$18 00
Laboratory fees	15 00	20 00	54 00
Books and stationery	15 00	25 00	40 00
Room	4 50	37 00	75 00
Furniture	10 00	.....	.....
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	<hr/> \$146 50	<hr/> \$224 00	<hr/> \$351 00

FREE SCHOLARSHIPS.

A free scholarship good for two years is granted to one student annually from each county in Ohio. If in any county there is no applicant for the free scholarship in the College of Agriculture and Domestic Science, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted. Each scholarship is valid two years from its grantal and covers the incidental fee, but the person appointed to receive its benefits is subject to all the conditions prescribed for admission to the course. Students taking laboratory work are required to make a deposit to cover materials broken or used up, the same as other students. The free scholarship can not be used in special winter term course in dairying. The appointments are made by the County Boards of Agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiry should be addressed to the Secretary or President of the County Agricultural Society.

For further information concerning these scholarships, inquiries should be addressed to the Dean of the College of Agriculture and Domestic Science.

FELLOWSHIPS.

To encourage graduates of this University, and of other similar and approved institutions in this State, to continue their studies and to undertake

advanced work leading to the higher degrees, the University authorities have established fellowship in several departments. These demand about one-half of the time of the fellow for laboratory or other similar assistance—as far as possible along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from \$250 to \$300 for the University year. At present there are three such fellowships in Rhetoric, two in Botany and in Chemistry, and one each in Economics, Mathematics and Zoology, and a few others in the technical and professional colleges.

The Stillman W. Robinson Fellowship in Engineering, recently endowed by Emeritus Professor Robinson for the encouragement of graduate research work in engineering, provides three hundred dollars (300) annually, and is open to graduates in Mechanical, Civil and Electrical Engineering.

Any student to whom this fellowship is awarded must devote his entire time to the work, which shall amount to at least sixteen hours per week, of which at least eight shall be in the line of original research or investigation.

This fellowship will be awarded on the Friday preceding Commencement Day. All applications must be filed with the committee on or before the first of June of the same year, and must include a general outline or the course of study and research proposed. This must show a definite object to be attained. The application may be for one or two years, preference being given to candidates electing the two year course.

SELF-SUPPORT.

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. *But the University cannot promise work to all applicants.* Many students find work in private families, in offices, and in various occupations, by means of which they defray a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find employment, but prospective students are cautioned against depending wholly upon such uncertain sources of income.

Students should distinctly understand that where they attempt entire or partial self-support they should lengthen the term of study.

As an accommodation the executive office co-operates as far as possible in this matter. The Y. M. C. A. offers its services in helping young men to secure employment. Very much depends, however, on the individual's power of initiative. Students should not come to the University expecting others to find places for them. They should report to the executive office from time to time as to their needs and their work. This will enable the authorities to be more helpful than otherwise would be possible.

RULES AND REGULATIONS.

REGISTRATION.

All students are required to register and pay their term fees on or before the first day of each term, between the hours of 8 a. m. and 12 m., or between 1 and 4 p. m., central standard time.

Former students who fail to register as above will be charged one dollar in addition to the usual incidental fee, for the first day of delinquency, and fifty cents additional for each subsequent day.

No candidate for graduation, except in the College of Arts, will be permitted to register for the second term of his graduating year, except upon presentation to the bursar, of the President's certificate that his thesis subject has been announced and approved.

ASSIGNMENT OF WORK.

Rule 89. The assignment of work shall be made and recorded for each student, as shall be determined by the several faculties; but at the beginning of each term or semester, each student's card shall be signed by the Secretary of his College before presentation to the bursar.

AMOUNT OF WORK.

No student is permitted to take less than fifteen credit hours a week of any sort of work, except by special permission, and no student will be per-

mitted to take more than the regular work of the class to which he belongs, who has not passed all his work for the preceding term.

CREDIT HOUR.

A credit hour means one hour class room work in lecture, recitation or quiz, or "two consecutive hours of practical or experimental work in any department shall be regarded as the equivalent of one hour of class-room exercise; but when no outside work is required in addition to the laboratory work, then three hours of laboratory work may be required as equivalent to one credit hour; and in general not more than three hours of the student's time, including class hours, shall be required for each credit hour."

ELECTIVE STUDIES.

All elections of work in continuous studies, when once made, are understood to be made for the entire collegiate year.

The right is reserved to each professor to withdraw the offer of any elective study when it is not chosen by at least four persons.

REMOVAL OF ENTRANCE CONDITIONS.

Rule 111. Students shall be regarded as strictly on trial until they have removed all deficiencies and conditions in entrance requirements.

Rule 112. Students who have any entrance conditions outstanding at the beginning of the third year of residence at the University will not be allowed to register until such conditions have been removed.

All entrance conditions must be removed by examination by the University officers. Certificates will not be received for entrance conditions after matriculation.

EXAMINATIONS AND STANDING.

At the close of any term a student failing to pass in two-thirds of his work will be considered on *probation* for the next three terms; and a second similar failure incurred while thus on "probation" will forfeit his connection with the University.

Rule 116. The standing of students in each study shall be reported at the end of each term or semester, as "merit," "passed," "conditioned," or "failed." This standing shall be determined by the head of each department by such means and methods as he may choose, but no student shall be reported "failed" without having had the opportunity of a written examination.

Rule 117. The standings "merit" and "passed" indicate that the student has full credit for the term's or semester's work in the study in which this standing is obtained.

Rule 118. The report "credit" (K) shall be used only for work not done in regular class at the University.

Rule 119. The standing "conditioned" indicates that credit for the term's or semester's work in the study in which the condition was incurred is withheld. The student shall be given an opportunity to obtain credit by a special re-examination; or if the study be a continuous one, the instructor in charge may, at his discretion, excuse the student from re-examination and may allow him to obtain credit by pursuing the study successfully during the following term or semester. If the student thus excused from re-examination does not pass upon the work of the second term or semester, he shall be reported as "failed" in the work of both terms or semesters. Any condition that is not removed within one year from the beginning of the term or semester in which it was incurred shall lapse into a "failure."

Rule 120. The standing "failed" indicates that the student has obtained no credit whatever for the term's or semester's work in which the mark is given. The student must, at the first opportunity, repeat in class the study in which he has failed. But a student who has failed in an elective study may be excused from repeating such study by the Executive Committee of his college. In case of failure in any continuous study the work of the term or semester in which the failure is incurred must be repeated in class before any subsequent term's or semester's work in that study can be commenced. Unexcused absence from any regular examination is construed as a failure therein.

Rule 121. Any student who fails at the end of any term or semester to secure full credit for two-thirds of his work shall be put on probation for the following term or semester with restricted work, and if similarly delinquent in his studies at any time within the next ten academic months, shall thereby cease to be a member of the University.

Rule 122. If for any cause the preparation, progress or success of any student in the work assigned him be found unsatisfactory, the President may remove him from a class or dismiss him from the University.

TERMS AND VACATIONS.

The first term of the University year begins on the Tuesday following the sixteenth day of September and closes on the Wednesday following the 17th day of June. The first term closes on the Wednesday preceding Christmas; the second term begins on the Tuesday following the first day of January and closes on the Friday preceding the first Monday in April; the third term begins on the Wednesday following the close of the second term. The second semester begins on Monday of the eighteenth week preceding commencement week; and the first semester closes on the Friday preceding the opening of the second semester. The regular college exercises are suspended from 4 o'clock p. m. of the Wednesday preceding Christmas until 8 o'clock a. m. of the Tuesday following the first day of January; on Thanksgiving and the day following; on University day, which is the 22d day of February; from 4 o'clock p. m. of the Friday preceding the first Monday in April; until 8 o'clock a. m. of the Wednesday following the first Monday in April; and on Memorial day.

STUDENT'S LOCAL ADDRESS.

Rule 1. Each student shall at the beginning of the year give, in writing, his or her local address to the President, and shall promptly report all subsequent changes of address.

SMOKING PROHIBITED.

Rule 53. Smoking is prohibited in the halls, basement and lecture rooms of the University buildings.

ROOM REGULATIONS.

Rule 56. The rooms of University student organizations which are located in the University buildings shall not be used for the purposes other than the usual exercises of such organization without the previously obtained consent of the general faculty.

Rule 57. No arrangements or announcements shall be made by students for any public gathering or exercises in the University buildings without the previously obtained consent of the President.

EXCUSES FOR ABSENCE.

Rule 66. All absences of individual students from the city, for any purpose, involving absence from college exercises, must be accounted for to the President; and in all possible cases permission must be previously obtained.

Excuses will not be granted for absences of more than two weeks' standing, unless the absence has been continuous.

THESIS.

As a requisite for graduation, each candidate, except in the College of Arts, must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be filed with the President of the University (dependent upon the approval of the head of the department), on the official blank provided for the purpose, not later than December 15 of the University year in which the degree is sought. The completed thesis must be submitted to the head of the department concerned not later than the second Saturday before Commencement Day.

The accepted thesis, on standard paper, Buckeye bond, 8½x11 inches, medium weight, typewritten or printed, neatly bound in black cloth, gilt-lettered

on first cover with the thesis title, name of author, degree sought and year of graduation, must be filed not later than the Friday preceding Commencement Day.

DEGREES.

FIRST DEGREES.

The following baccalaureate degrees are conferred at graduation upon those who have successfully completed the regular courses leading to such degrees and who have fulfilled all other requirements of the University.

BACHELOR OF ARTS, for all courses in the College of Arts, Philosophy and Science.

BACHELOR OF SCIENCE IN AGRICULTURE, for the four year course in Agriculture.

BACHELOR OF SCIENCE IN HORTICULTURE AND FORESTRY.

BACHELOR OF SCIENCE IN DOMESTIC SCIENCE.

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING.

BACHELOR OF SCIENCE IN INDUSTRIAL ARTS.

BACHELOR OF SCIENCE IN PHARMACY.

CIVIL ENGINEER.

CIVIL ENGINEER IN ARCHITECTURE.

ENGINEER OF MINES.

ENGINEER OF MINES IN CERAMICS.

MECHANICAL ENGINEER.

MECHANICAL ENGINEER IN ELECTRICAL ENGINEERING

BACHELOR OF LAWS

DOCTOR OF VETERINARY MEDICINE

HIGHER DEGREES

In College of Arts:

MASTER OF ARTS

DOCTOR OF PHILOSOPHY

In College of Laws:

MASTER OF LAWS

Advanced degrees are given for graduate work in the technical colleges.

THE COLLEGES

THE COLLEGES

ADMISSION.

The University is open on equal terms to both sexes.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy and Science, or of Pharmacy, must be at least 16 years of age; for admission to the College of Engineering or of Veterinary Medicine must be at least 17 years of age; for admission to the College of Law must be at least 18 years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

Entrance may be made at any time if the applicant is competent to take up the work of the classes then in progress; but it is desirable to begin work at the opening of the University in September.

There are two modes of admission to the University—by examination and by certificate.

ENTRANCE EXAMINATIONS.

The entrance examinations for 1903 will be held on Monday and Tuesday, June 22 and 23, and on Monday and Tuesday, September 21 and 22. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations. *All applicants for admission who are not graduates of high schools of approved standing must take examinations for admission.*

CERTIFICATES.

Applicants for admission to any of the colleges may be admitted on presentation of properly indorsed certificates from secondary schools which have been "accredited" or "recognized" by the University. The statement of principles and method of procedure in classifying secondary schools are set forth in the following articles adopted by the General Faculty:

(1) That, until any High School of this State is inspected or reported upon by the *High School Visitor* and acted upon by the High School Committee, the status of certificates of that school shall continue as heretofore.

(2) That as fast as schools are reported on by the *High School Visitor* and action taken thereon by the High School Committee, the certificate privilege in the case of all rejected schools shall be terminated at once and the Deans of the various colleges of the University shall be furnished with lists of such rejected schools as well as approved schools.

(3) That approved schools shall be classified as follows:

(a) ACCREDITED SCHOOLS.

Those four-year secondary schools whose courses of study offer such branches of study as prepare students for all colleges of the University.

All GRADUATES holding certificates from this class of schools will be admitted to any college of the University without examination, provided the required entrance branches are covered in the certificates.

(b) RECOGNIZED SCHOOLS

Those three or four-year secondary schools whose courses of study do not prepare students for all colleges of the University, but include not less than 10 units of secondary instruction.

Any GRADUATE holding a certificate from one of these schools will be admitted without examination to any college of the University for which he is prepared.

A certificate from a recognized school, when it is presented by a graduate thereof, will be accepted toward admission by any college of the University; but an applicant holding such a certificate, will be subject to examination in the requirements for admission not covered by the certificate.

(4) No school shall be placed in either class until visited and reported to the High School Committee, whose duty it shall be to determine whether the conditions and quality of work in the school will warrant placing it in either of the above classes.

(5) No applicant shall be admitted by certificate to any college of the University who is not a graduate of the School from which he bears a certificate; but an applicant for admission to the College of Pharmacy who brings a certificate showing that he has completed at least three years work in an accredited school may be admitted without examination in the subjects covered by the certificate.

(6) The foregoing provisions do not apply to the College of Veterinary Medicine, or to such courses as do not lead to a degree.

Up to the first of June, 1903, one hundred and fifty-one secondary schools had been inspected by the High School Visitor. From this number, the following classifications have been made:

ACCREDITED SCHOOLS.

(Certificate Privilege Expires June, 1906.)

Ashtabula	Fremont	Lancaster
Bryan	Gallipolis	Lockland
Cambridge	Glenville	Logan
Chillicothe	Grand River Institute	London
Circleville	Greenville	Madisonville
Clyde	Hamilton	Mansfield
Collinswood	Hillsboro	Martin's Ferry
Coshocton	Ironton	Marysville
East Cleveland	Jackson	Medina
East Liverpool	Jefferson	Miamisburg
Elyria	Lake Side	Nelsonville
Fostoria	Lakewood	Newark
New Lyme Institute	Troy	Wooster
New Philadelphia	Toledo	Wyoming
Plqua	Urbana	Xenia
Portsmouth	Washington C. H.	Zanesville
Sandusky	Wellington	Dayton
Springfield	Wellsville	

RECOGNIZED SCHOOLS

(Certificate Privilege Expires June, 1906.)

Athens	Germantown	Olive Branch, Clark Co.
Bellaire	Gnadenhutten	Orrville
Barnesville	Groveport	Plain City
Bethel T'p., Miami Co.	Kingsville	Pomeroy
Caldwell	Lebanon	Port Clinton
Canal Dover	Lorain	Soldiers' & Sailors' Orphans'
Canal Winchester	Napoleon	Home
Chagrin Falls	New Vienna	Shelby
Corning	North Baltimore	Tippecanoe City
Covington	Norwood	Uhrichsville
Euclid	Oberlin	Wauseon
Georgetown		Woodsville

The following named High Schools, not having been visited, will be treated as "recognized" schools until June, 1904:

Albany	Freeport	Oxford
Ailance	Genoa	Pemberville
Archbald	Glendale	Perrysburg
Ashley	Glouster	Perrysville
Attica	Goshen	Pioneer
Bench City	Gravelotte	Pleasant Ridge
Bedford	Hamden	Quaker City
Belle Center	Harmony	Quincy
Belleville	Harrison	Reynoldsburg
Belpre	Higginsport	Richwood

RECOGNIZED SCHOOLS—CONCLUDED

Bloomville	Holgate	Riley
Bradner	Hubbard	Ripley
Brecksville	Huron	Rising Sun
Caledonia	Jamestown	Rock Creek
Carey	Johnstown	Rockford
Carrollton	Kinsman	Rocky River
Carthage	Kirtland	Rootstown
Cedarville	LaGrange	Salineville
Centerburg	LaRue	Scio
Chesterfield	Leetonia	Shiloh
Chicago	Lepais	Shreve
Clarington	Lexington	Solon
Clinton	Litchfield	Somerset
College Corner	Manchester	Spencerville
Columbiana	Mantua	Stryker
Cortland	Marshallville	Swanton
DeGraff	Marshfield	Union
Delhi Station	McComb	Utica
Delphos	Mendon	Van Buren
Delta	Mesopotamia	Vermillion
Deshler	Midland	Wakeman
Dunkirk	Milan	Washington
Edgerton	Millford	Waynesville
Eldorado	Morrow	West Mansfield
Fairport Harbor	Mt. Sterling	West Richfield
Fayette	Mt. Victory	West Union
Felicity	New Richmond	West Unity
Forest	New Washington	Winchester
Fort Recovery	North Bloomfield	Woodsville
Frankfort	Orwell	
Fredericktown	Osborn	

The following named High Schools, not having been visited, will be treated as "accredited" schools until June, 1904:

Akron	Greenwich	Ottawa
Ashland	Groveport	Painesville
Barberton	Kent	Plymouth
Bellefontaine	Kenton	Prospect
Bellevue	LeRoy	Ravenna
Bucyrus	Lima	St. Clair
Canton	Lisbon	St. Marys
Cardington	Lodi	Salem
Cellna	Madison	Sidney
Cincinnati	Marietta	Steubenville
Cleveland	Marion	Tiffin
Columbus	Massillon	Upper Sandusky
Columbus Grove	McArthur	Van Wert
Crestline	Mechanicsburg	Wadsworth
Cuyahoga Falls	Millersburg	Wapakoneta
Delaware	Monroeville	Warren
Dresden	Mt. Gilead	Westerville
East Palestine	Mt. Vernon	West Liberty
Findlay	New London	Willoughby
Galion	Niles	Worthington
Garrettsville	Norwalk	Youngstown
Gibsonburg		

Diplomas and certificates from accredited and recognized schools will be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificate must state in detail the studies pursued, the textbooks used, the amount of work done in each study, the amount of time devoted to it, and the fact that the applicant has successfully passed in the work.

(b) The certificate will be accepted for such studies only, or such part of each, as it shall show to have been satisfactorily accomplished.

(c) Every such certificate must be accompanied with a diploma showing that the candidate has been graduated from the school from which he comes. *Blank certificates may be obtained by addressing the EXECUTIVE OFFICE, OHIO STATE UNIVERSITY, COLUMBUS.* Certificates should be filled out and returned to the University as early as possible after the close of the schools in June, and in any event not later than September 1.

DESCRIPTION OF SUBJECTS ACCEPTED FOR ADMISSION.

The following is a statement in full of the requirements in each subject accepted for admission to the University. Not all of these subjects are required

for admission to any one college or course. *For the specific requirements for admission to a particular college or course, see statement under that college.*

A unit course of study is a course covering a school year of not less than thirty-five weeks with four or five periods of at least forty-five minutes each per week.

(a) THE ENGLISH GROUP.

(1) *English Composition and Rhetoric. One unit.* Each applicant must be able to write clear and correct English, and no applicant will be accepted in English whose work is seriously defective in spelling, punctuation, grammar and paragraph structure. The proper preparation for this part of the requirement is practice in composition through the four preparatory years, with correction of themes by the teacher and revision by the pupil. Subjects for themes should not be taken exclusively from literature; a large share of the subjects should be based upon the pupil's observation and experience. Practice should be afforded in writing narrative, description, exposition and argumentation. Applicants should be familiar with those principles of Rhetoric which are most helpful in elementary composition; viz., the principles of sentence structure, outlining, paragraphing and choice of words. The amount and kind of work required is indicated in Scott and Denney's *Composition-Rhetoric*.

(2) *English Classics. One unit.* The following books, or equivalents, should be read with sufficient care to insure a knowledge of their story-plot, or argument, their chief incidents, and their principal characters; so that pupils may discuss them intelligently. Four or five of these books should be examined closely in class with reference to structure and leading characteristics of style. The list (until 1905) is as follows: Shakespeare's *Merchant of Venice*, *Julius Caesar*, and *Macbeth*; Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso*; Burke's *Conciliation with the Colonies*; Macaulay's *Essays on Milton and Addison*; The Sir Rodger de Coverly Papers in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Coleridge's *The Ancient Mariner*; Scott's *Ivanhoe*; Carlyle's *Essay on Burns*; Tennyson's *The Princess*; Lowell's *The Vision of Sir Launfal*; George Eliot's *Silas Marner*.

(3) *English Literature. One unit.* A good knowledge of the leading facts in the history of English Literature, as given in Scudder's *English Literature*, Johnson's *History of English and American Literature* or the *Introductions* by Pancoast, Painter, Halleck, or Newcomer; together with the reading of representative works of literature. This may be offered in lieu of subject (2).

(b) THE HISTORY GROUP.

(4) *Civil Government. One-half unit.* A good knowledge of the origin, principles, forms and powers of the national, state and local governments is expected. Fiske's *Civil Government*, with a special study of the State from which the student comes, may serve to indicate the amount and kind of knowledge sought.

(5) *United States History. One-half unit.* A good knowledge of the main facts and features of American history, especially of the period since 1750, is expected. Johnson's *High School History of the United States*, or McLaughlin's *History of the American Nation*, or Montgomery's *Students' American History* will serve to show the kind and amount of work sought. No credit upon certificate will be accorded in this subject for work done below the ninth grade.

(6) *General History. One unit.* Adams's *European History*, Myers' *General History*, or an equivalent.

(7) *Greek and Roman History. One-half unit.* Botsford's *History of Greece and History of Rome*, or equivalents.

(8) *English History. One-half unit.* Montgomery's *Leading Facts of English History*, or equivalent.

(c) THE MATHEMATICS GROUP.

Algebra and Geometry together count three units.

(9) *Algebra. Taylor's Elements of Algebra* or an equivalent.

First, special attention should be given to the four fundamental operations (single and system), factoring, highest common factor, lowest common multiple, fractions and fractional equations, involution, evolution, surds, complex quantities, quadratic equations, solved by factoring, by completing the square and the *general formula*.

Second, a thorough review of the work above named, irrational equations, simultaneous quadratic equations, higher equations solvable by factoring, ratio, proportion, progressions, theory of exponents, binominal theorem for positive integral exponents and use of five-place tables of logarithms. It is recommended that this work be taken in the last year of the high school course.

(10) (*Geometry.*) Venable, White, Wells, Wentworth, Beman and Smith, or an equivalent. Plane geometry with solution of originals. Solid and spherical geometry, with solution of originals given in the text-books named above.

(11) *Plane Trigonometry. One-half unit.* Lyman and Goddard's *Plane Trigonometry.*

(d) THE SCIENCE GROUP.

(12) *Physics. One unit.* Gage's *Elements*, Carhart and Chute, Avery, Appleton. Laboratory training, to accompany the work of the text-book, is strongly recommended, but is not required for the present.

(13) *Physical Geography. One-half unit.* Tarr's, Davis' or Gilbert and Brigham's *Physical Geography.*

(14) *Botany. One-half unit.* Kellerman's *Elementary Botany* and Spring Flora, or an equivalent. The course should be divided between spring and fall.

(15) *Chemistry. One unit.* Remsen's introduction to the Study of Chemistry, or its equivalent. For laboratory work, McPherson's *Laboratory Exercises*, arranged to accompany Remsen's *Chemistry*. The course should consist of at least three recitations and four hours laboratory work weekly. No credit in chemistry will be allowed for preparatory work less thorough than that outlined above.

(16) *Physiology. One-half unit.* Martin's *Human Body* (brief course). No credit will be accorded in this subject for work done below the ninth grade.

(17) *Zoology. One-half unit.* Brigham's, Dana and Rice's (revised),logg's "Elementary Zoology"; Davenport's "Introduction"; or equivalents, with laboratory work or field work.

(18) *Geology. One-half unit.* Brigham's, Dana and Rice's (revised), Tarr's or LeConte's, may be used as texts. The recitations should be supplemented by study of the geological phenomena and formations found in the vicinity of the school.

(19) *Astronomy. One-half unit.* Young's *Lessons*, Comstock's, or equivalent.

(e) THE FOREIGN LANGUAGE GROUP.

(20) *Latin. Two units.* Pronunciation (Roman method); Grammar (an exact knowledge of the inflections); Caesar, the first four books of the *De Bello Gallico*. *Third unit*—Cicero, six orations of Cicero, including *Pro Lege Manilia*. *Fourth unit*—Virgil, the first six books of the *Aeneid* with Prosody; and Prose Composition, Daniell, or Collar, or Jones, or Dodge and Tuttle, entire. Latin cannot be continued as a university study unless at least three units are offered for admission.

(21) *Greek. Two units.* Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons in White's *Beginner's Greek Book*. Reading: The first three books of Xenophon's *Anabasis*. A *third unit* will be allowed for preparation in the fourth, fifth and six books of the *Anabasis* and three books of Homer's *Iliad*, and a *fourth unit* for additional reading in Greek.

(22) *German. Two units.* The pupil should be able to read at sight, and to translate, if called upon, by way of proving his ability to read, a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions; to put into German short English sentences taken from the language of every-day life or based upon the text given for translation, and to answer questions upon the rudiments of grammar as defined below. During the first year the work should comprise: (1) Careful drill upon pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of every-day life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the model auxiliaries, and the elementary rules of syntax and word-order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into Ger-

man easy variations upon sentences and in the reproduction from memory of sentences previously read. During the second year the work should comprise: (1) The reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use his knowledge with facility in the formation of sentences, and, secondly, to state his knowledge correctly in the technical language of grammar.

Four units. The applicant must offer, in addition to the above, two additional years of instruction in German, including a review of the essentials of grammar. The rapid reading of at least 200 pages of prose; for example, the following: Heyse's *L'Arrabiata*, Riehl's *Der Fluch der Schönheit*, Hauff's *Lichtenstein*. The outlines of German literature should be mastered. In connection with this about 200 pages of German ballads and lyrics should be read. Some book like v. Klenze's *Deutsche Gedichte* might be used. A considerable portion of the prose and poetry should be read extemporaneously. About 50 pages in some prose composition should be translated. Text-books suggested are: v. Jagemainn's, Poll's or Harris' *Prose Composition*. The work in composition should be carried on as far as possible in German. All exercises should be had in this entire course, as far as they may be used without interfering with the thoroughness of the work.

(23) *French. Two units.* Applicants should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of every-day life or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below. During the first year the work should comprise: (1) Careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation. During the second year the work should comprise: (1) The reading of from 250 to 400 pages of easy modern (nineteenth century) prose in the form of stories, plays or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Four units. In addition to the above, the applicant should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose and to carry on a simple conversation in French.

(24) *Spanish. Two units.* Applicants should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of every-day life or based upon a portion of the Spanish text read, and to answer questions on the essentials of the grammar. The first year should be spent mainly on the grammar with easy reading and oral practice; the second devoted to reading good modern Spanish, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose, including one or more prose dramas of the present age.

Four units. In addition to the above, the applicant should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult Spanish, whether prose or poetry; to write in Spanish a short essay on

some simple subject connected with the works read, which shall show a thorough knowledge of syntax; to put into Spanish a passage of easy English prose, and to carry on a simple conversation in Spanish.

ADMISSION TO SPECIAL STUDIES.

Students who desire to pursue special lines of work and do not desire to become candidates for degrees, will be admitted on the following conditions:

1. The regular entrance requirements must be satisfied.
2. But applicants who are not less than twenty-one years of age after obtaining credit for the common English branches and for such other subjects as may be necessary to qualify them for the classes that they wish to enter, may, on the presentation of satisfactory reasons, be admitted to any class in the College; provided, that if any student who has been admitted on these conditions afterwards becomes a candidate for a degree, he shall pass the omitted entrance examinations at least twelve months before the degree is conferred.
3. On entering the College, students desiring to pursue special work are required to lay before the Executive Committee, for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of attendance. Such students will be held as strictly to their accepted schemes of work as are the regular undergraduates to their course of study.
4. Permission to enter as special undergraduates will be refused to all who fail to give satisfactory evidence of definiteness of purpose, and will be withdrawn whenever the conditions on which it was granted cease to exist.

ADMISSION TO ADVANCED STANDING.

1. Applicants who do not come from some other university or college must first obtain admission to the College in the manner already described. They will then be examined on the undergraduate studies for which they ask credits.
2. Applicants who come from the collegiate department of an approved College, and who bring explicit and official certificates describing their course of study and scholarship, and also certificates of honorable dismissal, will be admitted without examination except such as may be necessary to determine what credit they are to receive here for work done in the college from which they come.

ADMISSION TO GRADUATE WORK.

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

IN THE COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING, LAW AND PHARMACY.

Masters degrees are conferred upon graduates in Agriculture, Horticulture and Forestry, Engineering, Law and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study.

IN THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

Registration as a student in the Graduate School is open to all graduates of the College of Arts, Philosophy and Science of this University, and to graduates of other colleges of this University, or of other universities or colleges who satisfy the Administrative Board that they are qualified to pursue with profit the work here offered in the lines of study which they wish to carry on.

Graduates of institutions of which the undergraduate courses of study are not substantially equivalent to the course prescribed in this college for the bachelor's degree will be required to do an additional amount of undergraduate

work, or to prolong their term of residence, before being admitted to full candidacy for a higher degree.

Bachelors of this College or of other institutions who do not wish to become candidates for a higher degree may be admitted as special graduate students.

Application for admission as a graduate student should be addressed to the Chairman of the Administrative Board of the Graduate School.

THE COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

The College of Agriculture and Domestic Science offers six distinct courses of study:

1. *A four years' Course in Agriculture.*
2. *A four years' Course in Horticulture and Forestry.*
3. *A two years' Course in Agriculture and Horticulture.*
4. *A winter term's Course in Dairying.*
5. *A four years' Course in Domestic Science.*
6. *A two years' Course in Domestic Science.*

REQUIREMENTS FOR ADMISSION TO THE FOUR-YEAR COURSES.

The following are the requirements:

- A. Two units chosen from the following:

English Composition and Rhetoric.....	1 unit
English Classics	1 unit
English Literature	1 unit

- B. Two units chosen from the following:

Civil Government	$\frac{1}{2}$ unit
United States History.....	$\frac{1}{2}$ unit
General History	1 unit
Greek and Roman History.....	$\frac{1}{2}$ unit
English History	$\frac{1}{2}$ unit

- C. Two units as follows:

Algebra	1 unit
Plane Geometry	1 unit

- D. Two units as follows:

Physics	1 unit
Physical Geography	$\frac{1}{2}$ unit
Botany	$\frac{1}{2}$ unit

- E. Two units chosen from the following:

Latin	2 units
German	2 units
French	2 units

The extent and character of the work required in each subject mentioned above is to be found on pages 65-69.

For the present, the *German or French* required for admission may be begun at the University, but without University credits. A student may enter with conditions, amounting to two units, not counting German or French.

Algebra, Plane Geometry, Botany, Physics and Physical Geography are taught as a part of the Short Course in Agriculture. Students may prepare in these subjects for entrance to the four-year courses by entering the Short Course in Agriculture.

*A person twenty-one years of age, or over, who desires to pursue a special line of work and does not desire to become a candidate for a degree, may be admitted by vote of the Executive Committee to such classes as he is qualified to enter; provided, that if he afterwards becomes a candidate for a degree he must pass the requirements for admission at least one year before the degree is conferred. See "Admission to Special Studies," page 69.

REQUIREMENTS FOR SHORT COURSE IN DOMESTIC SCIENCE.

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar and United States History.*
2. *English*—(a) Composition and Rhetoric; (b) English Classics.
3. *Algebra.*
4. *Plane Geometry.*
5. *Civil Government.*
6. *General History.*

REQUIREMENTS FOR THE SHORT COURSE IN AGRICULTURE AND THE COURSE IN DAIRYING.

Applicants unless over twenty-one, must pass an examination in *Arithmetic, Geography, Grammar and United States History*, or bring high school or other certificates for those branches. The requirements for English Grammar in the Short Courses may be met by writing a business letter or theme on some practical subject. Applicants who are over twenty-one are admitted without examination.

ADMISSION TO SPECIAL STUDIES.

Students who desire to pursue special lines of work in this college and do not desire to become candidates for degrees, will be admitted on the following conditions, as stated on page 69.

ADMISSION TO ADVANCED STANDING.

For admission to advanced standing in this college see requirements as stated on page 69.

ADMISSION TO GRADUATE WORK.

For admission to graduate work in this college see statement on page 69.

OUTLINE OF THE COURSE IN AGRICULTURE

Degree: Bachelor of Science in Agriculture.

NOTE.—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of courses.

FIRST YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (10)	6	Agr'l Chemistry (11)	6	Agr'l Chemistry (12)	6
Principles.		Principles.		Organic.	
Zoology (1)	3½	Zoology (1)	3½	Zoology (1)	3½
Invertebrate.		Invertebrate.		Vertebrate.	
Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½
English Composition.		English Composition.		English Composition.	
†French (1)	4	French (1)	4	French (1)	4
Elementary.		Elementary.		Elementary.	
†German (1)		German (1)		German (1)	
Elementary.		Elementary.		Elementary.	
or		or		or	
Spanish (1)	4	Spanish (1)	4	Spanish (1)	4
Elementary.		Elementary.		Elementary.	
Cadet Service.*		Drawing (10)	3	Shopwork (1)	3
		Gymnasium.		Cadet Service.	

*A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' Cadet Service as a condition of graduation. Students physically incapacitated for Cadet Service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

SECOND YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agriculture (28)	4½	Agriculture (29)	4½	Agriculture (30)	4½
Breeds of Live Stock.		Breeds of Live Stock.		Principles of Breeding.	
Agr'l Chemistry (4)	5	Agr'l Chemistry (4)	5	Agr'l Chemistry (4)	5
Laboratory.		Laboratory.		Laboratory.	
*Horticulture (1)	4½	*Shopwork (2)	3	*Horticulture (3)	4½
Elements.				Plant Propagation.	
Physiology (1)	3	Physiology (1)	3	Physiology (1)	3
Anatomy.		Physiology.		Physiology.	
Zoology (4)	2½	Zoology (4)	2½	Zoology (4)	2½
Economic Entomology.		Economic Entomology.		Economic Entomology.	
Cadet Service.		Gymnasium.		Cadet Service.	

THIRD YEAR

REQUIRED.

Agriculture (11)	4½	Agriculture (12)	4½	Agriculture (13)	4½
Farm Equipment.		Soils.		Crops.	
Geology (2)	5	Geology (5)	3½	Drawing (16)	3
General.		Applied.		Astronomy (3)	2
*Vet. Medicine (28)	4½	Vet. Medicine (29)	4½	Meteorology.	
Anatomy.		General Pathology.		Vet. Medicine (30)	4½
††French (1)	4	French (1)	4	Special Pathology.	4
Elementary.		Elementary.		French (1)	
††German (1)		German (1)		Elementary.	
Elementary.		Elementary.		German (1)	
or		or		Elementary.	
†Spanish (1)		Spanish (1)		Spanish (1)	
Elementary.		Elementary.		Elementary.	

FOURTH YEAR

REQUIRED.

American History (1)	3	American History (1)	3	American History (1)	3
U. S. Political.		U. S. Political.		U. S. Political.	
or		or		or	
Economics (1)	2	Economics (1)	2	Economics (1)	2
Political Economy.		Political Economy.		Political Economy.	
Thesis.		Thesis		Thesis	

Eight hours per week through the year chosen from any of the following courses:

Agriculture (31)	4	Agriculture (32)	4	Agriculture (16)	4
Feeding.		Hygiene and Man-		Rural Economics.	
		agement.			
Agriculture (14)	4½	Agriculture (26)	4½	Agriculture (27)	4½
Animal Mechanics.		Live Stock Markets		Wools and other fibres.	
		and Commerce.			
Agriculture (19)	5	Agriculture (20)	5	Agriculture (21)	5
Agronomy.		Agronomy.		Rural Engineering.	
Agriculture (22)	5	Agriculture (15)	5	Agriculture (25)	5
Dairying.		Dairying.		Dairying.	
*Agr'l Chemistry (6)	4	Agr'l Chemistry (6)	4	Agr'l Chemistry (6)	4
Laboratory.		Laboratory.		Laboratory.	
Vet. Medicine (24)	3	Vet. Medicine (18)	3	Vet. Medicine (18)	3
Bacteriology (5)	4	Bacteriology (5)	4	Bacteriology (5)	4

ELECTIVE.

Four hours a week through the year chosen from any of the courses given in any of the Colleges of the University upon which the student is qualified to enter, except of the College of Law.

†Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

*After 1903-1904, Botany (6), (7), (8), 4.

*In case a student intends to elect Agricultural Chemistry (6) 4, and Agriculture (19), (20) and (21) 4, he may elect Agricultural Chemistry 5 hours in place of Veterinary Medicine (28), (29) and (30) 4½.

†After 1904-1905, Horticulture (1), (2), (3), 4½.

THESIS.

At the beginning of the fourth year, each student in this course shall take up as thesis work some special line of inquiry within the field of the degree sought. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

OUTLINE OF THE COURSE IN HORTICULTURE AND FORESTRY

Degree: Bachelor of Science in Horticulture and Forestry.

FIRST YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (10)	6	Agr'l Chemistry (11)	6	Agr'l Chemistry (12)	6
Principles.		Principles.		Organic.	
Zoology (1)	3½	Zoology (1)	3½	Zoology (1)	3½
Invertebrate.		Invertebrate.		Vertebrate.	
Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½
English Composition.		English Composition.		English Composition.	
*French (1)	4	French (1)	4	French (1)	4
Elementary.		Elementary.		Elementary.	
*German (1)		German (1)		German (1)	
Elementary.		Elementary.		Elementary.	
or		or		or	
Spanish (1)	3	Spanish (1)	3	Spanish (1)	3
Elementary.		Elementary.		Elementary.	
Cadet Service.		Drawing (10)		Shopwork (1)	
		Gymnasium.		Cadet Service.	

SECOND YEAR

REQUIRED.

Horticulture (1)	4½	Horticulture (2)	4½	Horticulture (3)	4½
Elements.		Vegetable Forcing.		Plant Propagation.	
Agr'l Chemistry (4)	5	Agr'l Chemistry (4)	5	Agr'l Chemistry (4)	5
Laboratory.		Laboratory.		Laboratory.	
Physiology (1)	3	Physiology (1)	3	Physiology (1)	3
Anatomy.		Physiology.		Physiology.	
Zoology (4)	2½	Zoology (4)	2½	Zoology (4)	2½
Economic Entomology.		Economic Entomology.		Economic Entomology.	
*French (1)	4	French (1)	4	French (1)	4
Elementary.		Elementary.		Elementary.	
*German (1)		German (1)		German (1)	
Elementary.		Elementary.		Elementary.	
or		or		or	
Spanish (1)	3	Spanish (1)	3	Spanish (1)	3
Elementary.		Elementary.		Elementary.	
Cadet Service.		Gymnasium.		Cadet Service.	

THIRD YEAR

REQUIRED.

Horticulture (5)	4½	Horticulture (6)	4½	Horticulture (14)	4½
Varieties of Fruit.		Principles of Fruit.		Olericulture.	
Agriculture (11)	4½	Culture.		Agriculture (13)	4½
Farm Equipment.		Agriculture (12)	4½	Crops.	
		Soils.		Astronomy (3)	2
Geology (2)	5	Geology (5)	3½	Meteorology.	
General.		Applied.		Drawing (16)	3
French (2)	4	French (2)	4	Zoology (3)	2½
German (4)		German (4)		Economic Entomology.	
or		or		French (2)	
Botany (17)		Botany (18)		German (4)	
Forest.		Histology of Wood.		or	
				Botany (19)	
				Forest Ecology and Pathology.	

*Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

†After 1903-1904, Botany (6), (7), (8) 4.

FOURTH YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Horticulture (8)	2½	Horticulture (9)	2½	Horticulture (10)	2½
Elements of Floriculture.		Window Gardening.		Home Gardening.	
Horticulture (11)	5	Horticulture (12)	5	Horticulture (13)	5
Elements of Forestry.		Forest Technology and Timber Physics.		Forest Economics.	
American History (1)	3	American History (1)	3	American History (1)	3
U. S. Political.		U. S. Political.		U. S. Political.	
or		or		or	
Economics (1)	2	Economics (1)	2	Economics (1)	2
Political Economy.		Political Economy.		Political Economy.	
Thesis.		Thesis.		Thesis.	

ELECTIVE.

Five hours a week through the year chosen from any of the courses given in any College of the University upon which the student is qualified to enter, except the College of Law.

THESIS.

The requirement for thesis is the same as for the Course in Agriculture. See page 74.

OUTLINE OF THE COURSE IN DOMESTIC SCIENCE

Degree: Bachelor of Science in Domestic Science.

FIRST YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (10)	6	Agr'l Chemistry (11)	6	Agr'l Chemistry (12)	6
Principles.		Principles.		Organic.	
Drawing (29)	2	Drawing (29)	2	Drawing (29)	2
Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½
English Composition.		English Composition.		English Composition.	
Zoology (1)	3½	Zoology (1)	3½	Zoology (1)	3½
Invertebrate.		Invertebrate.		Vertebrate.	
†French (1)	4	French (1)	4	French (1)	4
Elementary.		Elementary.		Elementary.	
†German (1)		German (1)		German (1)	
Elementary.		Elementary.		Elementary.	
Spanish (1)	4	Spanish (1)	4	Spanish (1)	4
Elementary.		Elementary.		Elementary.	
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

SECOND YEAR

REQUIRED.

Agr'l Chemistry (4)	5	Agr'l Chemistry (4)	5	Physiology (3)	3
Laboratory.*		Laboratory.*		Chemical Physiology.	
Domestic Economy (1)	5	Domestic Economy (2)	5	Bacteriology (3)	2
Food Economics.		Food Economics.		Domestic Economy (3)	5
Physiology (1)	3	Physiology (1)	3	Food Economics.	
††French (1)	4	French (1)	4	Physiology (1)	3
Elementary.		Elementary.		French (1)	4
††German (1)		German (1)		Elementary.	
Elementary.		Elementary.		German (1)	
or		or		Elementary.	
†Spanish (1)	4	Spanish (1)	4	or	4
Elementary.		Elementary.		Spanish (1)	
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Elementary.	

*Specific laboratory work will be provided for students in this course, where necessary.

†Where credit is received for elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

†After 1903-1904, Botany (6), (7), (13) 4,

THIRD YEAR

REQUIRED.

Domestic Economy (4)	5	Domestic Economy (5)	5	Domestic Economy (6)	5
Preservation of Foods.		Domestic Art.		Domestic Art.	
Drawing (20)	1½	Drawing (15)	1½	Drawing (15)	1½
Mechanical.		Architectural.		House Designing.	
French (2)	} 4	French (2)	} 4	French (2)	} 4
or		or		or	
German (4)		German (4)		German (4)	

Any two of the following studies:

English Literature (1)	3	English Literature (1)	3	English Literature (1)	3
Economics (1)	3	Economics (1)	3	Economics (1)	3
Political Economy.		Political Economy.		Political Economy.	
Education (1)	3	Education (1)	3	Education (1)	3
European History (1)	3	European History (2)	3	European History (3)	3
American History (1)	3	American History (1)	3	American History (1)	3
U. S. Political.		U. S. Political.		U. S. Political.	

FOURTH YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Domestic Economy (7)	4	Domestic Economy (8)	4	Domestic Economy (9)	4
Domestic Art.		Domestic Art.		Domestic Art.	
Horticulture (8)	2½	Horticulture (9)	2½	Horticulture (10)	2½
Elements of Floriculture.		Window Gardening.		Home Gardening.	
Zoology (5)	3	Domestic Economy (11)	2½	Domestic Economy (10)	2½
Entomology.		Therapeutic Diet, etc.		Household Economics.	
Thesis	2	Thesis	2	Thesis	2

ELECTIVE.

Six hours a week through the year chosen from any of the courses given in any College of the University upon which the student is qualified to enter, except in the College of Law.

THESIS.

The requirement for thesis is the same as for Course in Agriculture. See page 74.

THE SHORT COURSES.

No degree is given on the completion of the Short Courses but a certificate is issued stating fully the work done.

OUTLINE OF THE SHORT COURSE IN AGRICULTURE

FIRST YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1)	6	Agr'l Chemistry (8)	6	Agr'l Chemistry (9)	6
Principles.		Organic.		Applications.	
Mathematics (1)	5	Mathematics (3a)	5	Botany (1)	5
Algebra.		Geometry.		Elementary.	
Physics (1)	5	Physics (1)	5	Geology (1)	5
Elementary.		Elementary.		Physiography.	
Physiology (2)	3	Drawing (10)	3	Shopwork (2)	3
General.		Mechanical.			
Cadet Service		Gymnasium.		Cadet Service.	

SECOND YEAR

Not less than 15 hours per week through the year chosen from any of the following courses subject to conditions named under "Departments of Instruction."

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agriculture (28)	4½	Agriculture (29)	4½	Agriculture (30)	4½
Breeds of Live Stock.		Breeds of Live Stock.		Principles of Breeding.	
Agriculture (11)	4½	Agriculture (12)	4½	Agriculture (13)	4½
Farm Equipment.		Soils.		Crops.	
Agriculture (22)	5	Agriculture (15)	5	Agriculture (25)	5
Dairying.		Dairying.		Dairying.	

SECOND YEAR—Concluded.

Agriculture (31)	4	Agriculture (32)	4	Agriculture (16)	4
Feeding.		Hygiene and Man- agement.		Rural Economics.	
Horticulture (1)	4½	Horticulture (2)	4½	Horticulture (3)	4½
Elements.		Vegetable Forcing.		Plant Propagation.	
Horticulture (5)	4½	Horticulture (6)	4½	Horticulture (14)	4½
Varieties of Fruit.		Principles of Fruit Culture.		Olericulture.	
Vet. Medicine (28)	4½	Vet. Medicine (29)	4½	Vet. Medicine (30)	4½
Anatomy.		General Pathology.		Special Pathology.	
		Shopwork (1)	3	Zoology (7)	3
		Bacteriology (2)	2		
Cadet Service.		Gymnasium.		Cadet Service.	

OUTLINE OF THE SHORT COURSE IN DOMESTIC SCIENCE

FIRST YEAR

REQUIRED.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1)	6	Agr'l Chemistry (11)	6	Agr'l Chemistry (12)	6
Principles.		Principles.		Organic.	
Physics (1)	5	Physics (1)	5	Botany (1)	5
Elementary.		Elementary.		Elementary.	
French (1)	4	French (1)	4	French (1)	4
German (1)		German (1)		German (1)	
or		or		or	
Spanish (1)		Spanish (1)		Spanish (1)	
Drawing (29)	2	Drawing (29)	2	Drawing (29)	2
Hygiene and Phys. Train.		Hygiene and Phys. Train.			

SECOND YEAR

REQUIRED.

Domestic Economy (1)	5	Domestic Economy (2)	5	Domestic Economy (3)	5
Domestic Economy (4)	5	Domestic Economy (5)	5	Domestic Economy (6)	5

ELECTIVE.

Not less than seven hours per week chosen from the following courses, subject to the conditions named under "Departments of Instruction."

Drawing (20)	1½	Drawing (15)	1½	Drawing (15)	1½
Botany (6)	4	Botany (7)	4	Botany (13)	4
Physiological.		Economic.		Household.	
Education (1)	3	Education (1)	3	Education (1)	3
English Literature (1)	3	English Literature (1)	3	English Literature (1)	3
Horticulture (8)	2½	Horticulture (9)	2½	Horticulture (10)	2½
Elements of Floricul- ture.		Window Gardening.		Home Gardening.	
Zoology (1)	3½	Zoology (1)	3½	Zoology (1)	3½
Invertebrate.		Invertebrate.		Vertebrate.	
Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½
Physiology (1)	3	Physiology (1)	3	Physiology (1)	3
European History (1)	3	European History (2)	3	European History (3)	3
American History (1)	3	American History (1)	3	American History (1)	3

OUTLINE OF THE COURSE IN DAIRYING

The Course in Dairying begins the first Tuesday in January; all other courses begin on Tuesday following the sixteenth of September. Students wishing to take the Course in Dairying should send for special pamphlet entitled "The Dairy School."

The Two Term Course in Dairying.

FIRST YEAR

REQUIRED WORK.

Agriculture (7). Dairy Lectures—Three hours per week.
Agriculture (6). Dairy Laboratory—Four half days per week.
Agricultural Chemistry (7). Milk Chemistry and Milk Testing—Two lectures and two laboratory periods per week.
Mechanical Engineering (26). Care of the Steam Engine and Boiler—One hour per week. Lectures.

SECOND YEAR

REQUIRED WORK.

Agriculture (41). Feeds and Feeding—Three hours per week.
Agriculture (42). Dairy Laboratory—Four half days per week.

ELECTIVES.

Agriculture (41). Feeds and Feeding—Three hours per week.
Agriculture (44). Dairy Breeds and Breeding—Four hours per week. Lectures, judging and expanding pedigrees.
Bacteriology (2). Milk Fermentations—Two hours—Lectures and laboratory per week.
Veterinary Medicine (7). Diseases of Dairy Cattle—Four hours per week.
Agricultural Chemistry (15). Chemistry of Milk—A continuation of ag. chem (7). One lecture and two half day laboratory periods per week.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

The College of Arts, Philosophy and Science offers two courses of study:
The Undergraduate Course.
The Graduate Course.

REQUIREMENTS FOR ADMISSION.

Fifteen units, as described below, are required for *unconditional* admission. No one under twenty-one years of age* will be admitted on less than thirteen units. For *unconditional* admission the candidate must be prepared to offer:

- A. Two units chosen from the following:

English Composition and Rhetoric.....	1 unit
English Classics	1 unit
English Literature	1 unit
- B. Two units chosen from the following:

Civil Government	$\frac{1}{2}$ unit
United States History.....	$\frac{1}{2}$ unit
General History	1 unit
Greek and Roman History.....	$\frac{1}{2}$ unit
English History	$\frac{1}{2}$ unit
- C. Three units as follows:

Algebra	3 units
Plane Geometry, and Solid Geometry or Plane Trigonometry	3 units
- D. Two units chosen from the following, including Physics:

Physics	1 unit
Physical Geography	$\frac{1}{2}$ unit
Chemistry	1 unit
Botany	$\frac{1}{2}$ unit
Physiology	$\frac{1}{2}$ unit
Zoology	$\frac{1}{2}$ unit
Geology	$\frac{1}{2}$ unit
Astronomy	$\frac{1}{2}$ unit
- E. Six units chosen from the following; or two *extra* units, chosen from the preceding groups, and four units from the following:

Latin	2 or 4 units
Greek	2 or 4 units
German	2 or 4 units
French	2 or 4 units
Spanish	2 or 4 units

The extent and character of the work required in each subject mentioned will be found on pages 65-69.

*A person twenty-one years of age, or over, who desires to pursue a special line of work and does not desire to become a candidate for a degree, may be admitted by vote of the Executive Committee to such classes as he is qualified to enter; provided, that if he afterwards becomes a candidate for a degree he must pass the requirements for admission at least one year before the degree is conferred.

ADMISSION TO SPECIAL STUDIES.

Students who desire to pursue special lines of work in this College will be admitted on the conditions as stated on page 69.

ADMISSION TO ADVANCED STANDING.

For admission to advanced standing in this College see requirements as stated on page 69.

ADMISSION TO GRADUATE SCHOOL.

For admission to the graduate school see statement as found on pages 69, 70 and 84.

REQUIREMENTS FOR GRADUATION.

UNDERGRADUATE COURSES OF STUDY.

The entire work of the College of Arts, Philosophy and Science is organized on the group and elective system. While under the new system the "courses"¹ formerly offered in this College, quite rigid and independent of one another, do not appear as such, it will be found that several of the new groups correspond to the former "courses," in their chief studies and leading aims, but with much greater flexibility and much freer opportunities for election in each group. The new system also provides for many other "courses" than have hitherto been possible, having equally specific aims. The groups, so far as at present arranged, number fourteen. The characteristic features of each group may be judged from its name which is made up of the names of the chief studies of the group.

About one-third of every student's "course" is prescribed. Each student is required to lay sufficiently broad foundations, during the first two years, in English, in two other languages to be chosen by himself, in mathematics and one science, or in two sciences to be chosen by himself, and in history, economics, English literature, or philosophy. The remaining two-thirds of each student's "course" is elective; but in order to insure substantial results in the studies thus freely chosen, the student is required to continue two of his first-year studies (any two) through the second year, one of his second-year studies (any one) through the third year, and one of his third-year studies (any one) through the fourth year. The freedom permitted in the groups is thus large enough to enable a student who had insufficient acquaintance with his own tastes and tendencies when he entered the College and who selected a curriculum that proved unsatisfactory in some respects, to rectify the error by shifting his choice of a study or studies to be continued from year to year. In order to guard against the danger of too narrow or too wide a range of work, a maximum and a minimum number of departments is fixed in which the student is allowed to work during any one year of his "course." In the first and second years the number of departments thus fixed is four or five; in the third and fourth years the number is three or four.

The degrees conferred at the satisfactory completion of a "course" in the College of Arts, Philosophy and Science will hereafter be the degree of Bachelor of Arts.

All members of the Faculty, but the Dean and the members of the Executive Committee especially, are always glad to advise with the students respecting choice of studies.

REQUIREMENTS.

On satisfactory completion of 180 term hours under the restrictions prescribed below, the student will be recommended for the Degree of Bachelor of Arts.

¹ Arts or Classical, Latin-Philosophy, Modern Language, Philosophy, English Philosophy, General Science, Commerce and Administration, Education, Preparatory to Law, Preparatory to Medicine, Preparatory to Journalism.

The 180 term hours must include the following, amounting to 57 term hours:

- (a) Rhetoric 1. (2-2-2) 6 term hours.
- (b) Two of the following: (8-8-8) 24 term hours.
 Greek 1 or 7, 8, 9; Latin 1, 2, 3;
 French 1 or 2; German 1 or 4; Spanish 1 or 2.
- (c) Mathematics 31, 32, 33 and 24. (6-6-6) 18 term hours.
 Two of the following:
 Mathematics 21, 22, 23; Physics 11 or 2;
 Chemistry 1; Botany 21, 22, 23; Zoology 1;
 Geology 17; Physiology 1.
- (d) One of the following: (3-3-3) 9 term hours.
 European History 1 or 14; American History 1;
 Economics 1 or 2, 3, 4; Philosophy 18, and 19 or 20;
 English Literature 1.

For the remaining 123 term hours required for graduation the student may elect from any courses announced for students of this College in the "Departments of Instruction." (see pages 110 to 180) as follows:

- American History and Political Science—All courses.
- Anatomy and Physiology—Courses 1, 3, 4, 5, 9, 11.
- Astronomy—All courses.
- Bacteriology—5, 6.
- Botany—3, 4, 6, 7, 8, 9, 10, 11, 13, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 32, 33, 28, 29, 30, 31.
- Chemistry—1, 2, 17, 21, 20, 31, 8, 9, 11, 30, 35, 33, 32, 15, 25, 26, 27, 28, 29, 36.
- Civil Engineering—21.
- Domestic Science—1, 2, 3, 10.
- Drawing—7, 10, 14, 17, 18, 19, 24, 25, 26.
- Economics and Sociology—All courses.
- Education—All courses.
- Electrical Engineering—6, 7, 8, 9, 10, 11.
- English Literature—All courses.
- European History—All courses.
- Geology—6, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
- German—All courses.
- Greek—All courses.
- Latin—All courses.
- Law—Elementary Law, 5 hours; Contracts, 4 hours; Negotiable Instruments, 5 hours.
- Mathematics—21, 22, 23, 24, 28, 31, 32, 33, 41, 42, 43, 71, 72, 73, 25.
- Mechanical Engineering—34.
- Metallurgy and Mineralogy—2, 3, 5.
- Philosophy—All courses.
- Physics—2, 3, 4, 11, 12, 13, 14, 15.
- Rhetoric and English Language—All courses.
- Romance Languages—All courses.
- Zoology and Entomology—1, 2, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27.

FIRST YEAR

- (a) Fifteen hours each term. This must include all the prescribed work indicated above, including Rhetoric 1.
- (b) Cadet service (men); Hygiene and Physical Training (women); required throughout the first year.

SECOND YEAR

- (a) Fifteen hours each term. This must include all the prescribed work not done in the first year; the other work of the second year to be in three or four departments of which at least two shall be departments in which the student has worked during the first year.
- (b) Cadet service (men); Hygiene and Physical Training (women); required through the second year.

THIRD YEAR

Fifteen hours each term in three or four departments, at least one to be a department in which the student has worked during the second year.

FOURTH YEAR

Fifteen hours each term in three or four departments, at least one to be a department in which the student has worked during the third year.

EXTRA HOURS

A student who has postponed a study in group (b) from the first to the second year, may take sixteen hours in the second year, and by the permission of the Executive Committee a student who has shown exceptional proficiency may be allowed to undertake from one to three extra hours. No extra hours will be granted to a first-year student, or to any student with conditions outstanding.

RULES GOVERNING ELECTIONS

Each student enrolled in the College of Arts, Philosophy and Science must file at the Registrar's office not later than June 1st of each year a complete statement of the courses he wishes to enter the following year. Blanks for this purpose may be obtained of the Registrar.

FIRST YEAR OPTIONS

In order to meet the requirements for graduation, the first-year student must arrange his work on one of the following plans:

I. Rhetoric; two languages; two sciences, or mathematics and one science, or mathematics alone; deferring until the second year the selection from group (d), above.

II. Rhetoric; two languages; mathematics or science; one subject from group (d); deferring until the second year a second subject from group (c) above.

III. Rhetoric; one language; two sciences, or mathematics and one science, or mathematics alone; one subject from group (d); deferring until the second year the second language from group (d), above.

In order to assist the student in his choice of work for the first two years, more specific directions are given below in connection with various natural groupings of studies. *These groups are not mandatory.* The student may make other combinations than those suggested, provided his selection of studies fulfills one of the three options given above. In the second year many other combinations are possible. The time schedule, however, is arranged primarily to fit the combinations recommended. The days and hours at which each study is taught may be found by looking up that study on pages 110 to —. The title of a group indicates the chief studies of that group. For the work of the first-year student, groups 1 to 6 recommend a complete curriculum. Groups 7 to 14 name only one or two first-year studies, it being understood that the remaining studies of the first year will be chosen as recommended in some one of the first six groups.

STUDY GROUPS

1. *Greek-Latin.* First year: Greek 1 or 7, 8, 9; Latin 1, 2, 3; Rhetoric 1; and either 6 hours in (c) or 3 hours in (c) and 3 hours in (d). Second year: Greek 7, 8, 9, or 10, 11, 12; Latin 4, 5, 6. This group corresponds to the former Classical or Arts Course. Before choosing the 3 hours in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

2. *Latin-Modern Language.* First year: Latin 1, 2, 3; French 1 or 2, or German 1 or 4, or Spanish 1 or 2; Rhetoric 1; and either 6 hours in (c) or 3 hours in (c) and 3 hours in (d). Second year: Latin 4, 5, 6; French or German, or Spanish, continued. This group corresponds in general to the Latin-Philosophy Course. Before choosing the 3 hours in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

3. *Modern Language.* Substitute two modern languages for Greek and Latin in group 1 above. *Not more than one new language should be begun in the first year.* The student who offers but one language for admission and who does not desire to continue that language in the University should follow the arrangement of language studies suggested in the next group. This group corresponds in general to the former Modern Language-Philosophy Course. Before choosing the work in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

4. *General Science.* First year: German 1 or 4, or French 1 or 2; Chemistry 1; Mathematics 21, 22, 23; Rhetoric 1; 3 hours in (d). Second year: Continue Chemistry and one other study of the first year; add a second modern language and one of the following: Physics 2; Botany 21, 22, 23; Physiology 1; Zoology 1; Geology 17; Astronomy 1. This group corresponds in general to the former Course in Science. It also opens the way to a thorough professional course in Chemistry. Before choosing the work in (d) read groups 7 to 12.

5. *Mathematics-Physics-Astronomy.* First year: Mathematics 31, 32, 33, 24; French 1 or 2, or German 1 or 4; Rhetoric 1; 3 hours in (d). Second year: Mathematics 41, 42, 43; Physics 2; Chemistry 1; Rhetoric 10; and a second modern language. Third year: Astronomy 1 and 2. Instead of Mathematics 31, 32, 33, 24 in the first year, Chemistry 1 and Mathematics 21, 22, 23, may be chosen, to be followed by Mathematics 28 in the second year. This group emphasizes the sciences named in the title. Before choosing the work in (d) read groups 7 to 12.

6. *Biological Sciences.* First year: French 1 or 2, or German 1 or 4; Chemistry 1; Botany 21, 22, 23, or Zoology 1; Rhetoric 1; 3 hours in (d). Second year: Botany; Zoology; Physiology 1, or Physics 11, or Geology 17; and a second modern language. This group corresponds to the former Course Preparatory to Medicine. Before choosing the work in (d) read groups 7 to 12.

7. *English-Rhetoric.* First year: Include English Literature 1. Second year: Include European History 14; English Literature 2, 3, 4, or 5, 6, or 18 and either Rhetoric 15, 16, or Rhetoric 2, 3, with Philosophy 18, 19. This group corresponds to the former English Philosophy Course and Course Preparatory to Journalism.

8. *Economics-History.* First year: Include European History 1, or Economics 1 or 2, 3, 4. Second year: Include American History 1, and the subject named above not taken in the first year, continuing the other. This group corresponds to the former English Philosophy Course and Course Preparatory to Law and Journalism.

9. *History-Political Science-Administration.* First year: Include American History 1, or European History 1 or 14. Second year: Include Political Science 1 or Economics 1 and the subject named above not taken in the first year. European History 4 should be taken later. The student who has not a reading command of French or German should begin French or German not later than the second year, continuing the study during two years. This group corresponds to the former Course in Administration. It opens the way to a thorough preparation for law or the public service.

10. *Commerce-Law.* First year: Include German 1 or 4, and Economics 1. Second year: Include Economics, and American History 1 or Elementary Law. This group corresponds to the former Course in Commerce and opens the way to a thorough preparation for a business career.

11. *Sociology-Philosophy.* First year: Include Economics 2, 3, 4. Second year: Include Sociology, Philosophy 15, 16, 17 and one of the following: American History 1, European History 1, Economics 1 or 5, 6, 7. This group emphasizes the studies regarded as essential in preparation for certain important forms of municipal and social service.

12. *Philosophy-Education.* First year: Include Philosophy 18, 19. Second year: Include Philosophy 20, 21 and Education 1, 2, or 3. This group corresponds to the former Course in Education, opening the way to a thorough study either of philosophy, or of educational problems.

13. *General Literature.* Continue both languages offered for admission, begin a third language in the second year and a fourth in the third year. Include English Literature 1 and European History 14 in the work of the first two years, and take Philosophy 15, 16, 17, or 18, 19, in second or third year.

14. *General Philology.* Greek if not offered for admission should be begun in the first year, and Latin continued. Second year: Include English Language 15, 16, and German 1 or 4. Note prerequisites for courses 14, 15, in French; 14 to 21 in Germanic Languages; 19, 20, 21 in Greek; 12 to 25 in Latin; 17 to 20 in English Language.

NOTICE TO THE CLASSES OF 1904 AND 1905

1. Members of the Class of 1904 are required to complete their respective Courses as given in the catalogue of June, 1901, up to the beginning of the third year, and in addition 90 term hours according to the new requirements, including at least 9 term hours in the department of Philosophy unless the

student has already completed that amount in said department; the degree to be B. A.; or, on request of student filed before June 1, 1904, the degree of B. Ph. or B. Sc. for which the student has previously been enrolled; provided that no student will be recommended for the degree of B. Sc. unless he shall have completed at least 60 term hours in Sciences and Mathematics before Commencement day of June, 1904.

2. Members of the Class of 1905 are required to complete their respective Courses as given in the catalogue of June, 1901, up to the beginning of the second year, and in addition 135 term hours according to the new requirements, including at least 9 term hours in a study in group (d) unless the student has already completed that amount in a study in that group; the degree to be B. A.; or, on request of the student filed before June 1, 1905, the degree of B. Ph. or B. Sc., for which the student has been previously enrolled; provided that no student will be recommended for the degree of B. Sc. unless he shall have completed at least 60 term hours in Sciences and Mathematics before the Commencement of June, 1905.

THE GRADUATE SCHOOL.

ORGANIZATION.

In order better to meet the rapidly increasing demands made by graduates of Ohio Colleges upon the University for graduate instruction, the Faculty of the College of Arts, Philosophy and Science has recently reorganized the scheme of graduate work. The object of the present plan is to emphasize and utilize in greater degree the facilities which the University affords for advanced students and to secure a more effective and systematic arrangement and supervision of the higher work. Whereas the graduate courses and instruction are organically within the College of Arts, Philosophy and Science, the supervision and administration of all matters connected with the graduate work has been lodged in an Administrative Board, consisting of the Dean and four other members chosen from the Faculty. The Chairman of the Administrative Board is Professor George W. Knight, to whom all communications should be addressed.

ADMISSION

Registration as a student in the Graduate School is open to all graduates of the College of Arts, Philosophy and Science of this University, and to graduates of other colleges of this University, or of other universities or colleges who satisfy the Administrative Board that they are qualified to pursue with profit the work here offered in the lines of study which they wish to carry on.

Graduates of institutions of which the undergraduate courses of study are not substantially equivalent to the course prescribed in this college for the bachelor's degree will be required to do an additional amount of undergraduate work, or to prolong their term of residence, before being admitted to full candidacy for a higher degree.

Bachelors of this College or of other institutions who do not wish to become candidates for a higher degree may be admitted as special graduate students.

Application for admission as a graduate student should be addressed to the Chairman of the Administrative Board of the Graduate School. Full details should be forwarded of the candidate's previous course of study, the degree desired, and the special preparation already had in the major and minor subjects to be pursued.

As the first question to be decided is whether the degree already taken by the applicant is substantially the equivalent of the degree given in this College, full information on this point is required. This should include a general statement of the character of the course pursued, with special reference to the amount of mathematics, science and the languages, including English. Blank forms of application may be obtained from the Registrar of the University.

The second question touches the qualifications of the applicant to enter upon advanced work in the special departments of study in which he desires to work. In order to determine this, a detailed statement is necessary of the previous course of study in the major and minor subjects which the applicant

desires to pursue. Official evidence of the above statements must be submitted before the applicant is admitted to full registration.

No graduate student will be registered as a candidate for a higher degree later than October first of the academic year in which he seeks a degree.

COURSE OF INSTRUCTION

For Candidates for Higher Degrees. Unlike the curriculum for undergraduates, the work of candidates for higher degrees is not confined to specific courses of instruction regularly offered in the College. Each student chooses a major study, and one or two minor studies, which must be approved by the Administrative Board before he enters upon his work. This may consist of attendance upon specified courses or of private research or reading and report thereon. The professors in charge of the studies chosen constitute a special committee, the professor in charge of the major study being the chairman, to arrange the details of the work comprising the major and minor studies, to supervise the work of the student, to examine and pass judgment on the thesis and to conduct the final examination.

Upon the completion of the prescribed course a final examination upon the entire work undertaken for the degree is held under the direction of the special committee, except that at the option of the committee the examination upon the minor or minors may be held whenever such minor or minors are completed.

A thesis upon some subject within the field of the major study is required of all candidates for the doctor's degree; and is also required of all candidates for the master's degree unless waived in individual cases by the Administrative Board on the recommendation of the special committee in charge of the candidate's work.

With the approval of the Administrative Board a candidate for a higher degree may elect specific courses, additional to the major and minor studies. For such election any course offered in the College of Arts, Philosophy and Science is open to candidates who satisfy the head of the department that they are qualified to pursue it with profit. The amount of such additional elective, if any, which the student may take must in each case be determined by the Administrative Board, and it is to be understood that such work, if allowed, will not be credited towards the degree for which the candidate is working.

For Graduate Students not Candidates for a Degree. Graduate students who are not seeking a higher degree are not required to designate major and minor studies, but may select their work with a view to the special purpose for which they are in attendance at the University. Any course of instruction announced in the College of Arts, Philosophy and Science is open for election by graduate students not candidates for a degree who satisfy the head of the department that they are qualified to pursue it with profit. But the list of elections so chosen must in each case be approved by the Administrative Board before the student enters upon his work.

Should such student subsequently desire to become a candidate for a higher degree, the Administrative Board will determine how much, if any, of the work previously done as a graduate student can be counted as a part of the major and minor studies requisite for the degree sought.

REQUIREMENTS FOR HIGHER DEGREES

The University confers two higher degrees, Master of Arts and Doctor of Philosophy, upon the completion of approved courses of resident graduate study.

The Master's Degree. The Degree of Master of Arts is open to those holding the Bachelor's degree who have been admitted to full candidacy as indicated above (see Admission, second paragraph). A residence of at least one year at this University wholly devoted to the work for the degree is required. With the consent of the committee the work of the candidates for the Master's degree may be distributed over more than one year. *The Master's degree is not conferred for study in absentia.*

A holder of the Bachelor's degree will be recommended for the degree of Master of Arts upon the completion of the prescribed term of residence, and passing a final examination in the course of study laid out for him, covering a major and one or two minor subjects approved by the Administrative Board, and unless waived by the same committee, the submission and acceptance of a

thesis, on some subject within the field of the major study. The major study must be in advanced work; the minor study or studies may, with the approval of the Administrative Board, be of a more elementary character.

The subject of the Master's thesis must be chosen and approved by December 1st, and the completed thesis must be submitted not later than June 1st. A typewritten copy of the accepted thesis must be deposited with the University before the candidate will be recommended for a degree.

The Doctor's Degree. The degree of Doctor of Philosophy is open to those holding the Bachelor's degree who have been admitted to full candidacy as indicated above (see Admission, second paragraph), and who also fulfill the terms of this and the next paragraph. At least three years of resident graduate work is required, but on approval of the Administrative Board the first year or the first two years may be spent at another university which offers equivalent graduate work.

Save in the cases of persons who come properly accredited from a graduate school of some other university no student will be enrolled as a candidate for the degree of Doctor of Philosophy until he has been in residence as a graduate student at this University for one year. Formal application for enrollment as a candidate for the degree must be made at least one year before the candidate expects to present himself for final examination. No person will be admitted to candidacy for the degree who does not possess at the time of enrollment a reading knowledge of French and German.

Each candidate for the Doctor's degree must pursue a major study and two allied minor studies, one of which may be within the same department as the major. All of them must be advanced, specialized work. The degree is intended to represent not a specified amount of work, covering a specified time, but long study and high attainment in a special field.

Each candidate is required to prepare a thesis within the field of his major study, involving an extended research or investigation and constituting an original contribution to knowledge. The thesis for the Doctor's degree is one of the most essential factors of the candidate's work, since it measures his accuracy and power of independent investigation. The preparation of an acceptable thesis will usually require the greater part of an academic year.

After the acceptance of the thesis the candidate will be examined by his special committee upon the entire work undertaken for the degree, except that at the option of the committee the examination on the minors may be held whenever such minors are completed.

Each candidate is required to have his accepted thesis printed and to deposit with the University library fifty copies to be used for exchange purposes.

The subject of the thesis for the Doctor's degree must be chosen and approved by the special committee by November 1st of the college year in which the applicant expects to take the degree. The completed thesis must be submitted not later than May 1st. The final examination will be held not later than June 1st.

THE LAKE LABORATORY

COURSES OF STUDY

ZOOLOGY AND ENTOMOLOGY.

(a) *General Zoology.* Laboratory and field course with occasional lectures and quiz, and including dissection or microscopic study of type forms, aquaria and field studies with instruction in collecting and preparing material for laboratory use and permanent collections. Special attention will be given to fishes and food of fishes. Associate Professor Landacre.

(b) *Advanced Courses.* Invertebrate Morphology and Comparative Anatomy of Vertebrates. Equivalent to similar courses in the University, and credits of one term may be secured. Prof. Osborn; Associate Prof. Landacre.

(c) *Entomology.* Field and laboratory course, including instruction in collecting, mounting and identifying insects in connection with studies on life history and anatomy. Prof. Osborn; Associate Prof. Hine.

(d) *Ichthyology.* Special course devoted particularly to the lake fishes, their habits and food supplies. Prof. Osborn; Associate Prof. Landacre.

(e) *Ornithology*. Special course in systematic and ecological study of birds of the region. Associate Prof. Hine.

BOTANY

(a) *General Botany*. Laboratory and field course, including the study of type forms, from the lowest to the highest orders. The course will consist of collecting trips in the field where common species of each class are found, classification of the familiar forms and the study of the structure of interest in connection with the evolution and relationship of each group; also methods of preparation and preservation for future use. Prof. Kellerman.

(b) *Ecology*. General course (following Coulter's Plant Relations), and a study of local problems and local plant geography. Prof. Kellerman.

(c) *Special Work*. Subject selected may be in Ecology; or some plant or small group in Systematic Botany. Prof. Kellerman, Mr. Jennings.

(d) *Morphology and Taxonomy of Algae*. Field and laboratory work with occasional lectures. Prof. Kellerman.

(e) *Morphology and Taxonomy of Fungi*. Field and laboratory work with occasional lectures. Prof. Kellerman.

For courses c, d and e University credits may be secured.

PHYSIOLOGY

A course in Physiology will be offered by Prof. A. M. Bleile, provided a sufficient number apply for such work to warrant its introduction.

THE COLLEGE OF ENGINEERING

The College of Engineering offers instruction in nine fields of Engineering work.

FOUR YEAR COURSES

Architecture, Ceramics, Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Arts, Manual Training, Mechanical Engineering, Mining Engineering.

TWO YEAR COURSES

The following short courses do not lead to degrees, but students completing them are furnished with formal certificates setting forth the work they have accomplished:

Clay-working, Industrial Arts and Shopwork, Mining.

REQUIREMENTS FOR ADMISSION TO THE FOUR YEAR COURSES

Applicants to be admitted to full standing in this College must be at least seventeen years of age and must obtain credit by examination or certificate for the necessary number of units chosen from the list given below, subject to the printed restrictions; for the college year of 1903-04 credit for eleven units is necessary; for the college year of 1904-05 credit for thirteen units is necessary. Applicants slightly in arrears may be admitted to Freshman work subject to certain entrance conditions as set forth on page 89.

The extent and character of the work required for credit in each subject mentioned in the following list will be found on pages 65-69.

ENGLISH

- A. Two units chosen from the following:
- | | |
|---------------------------------------|--------|
| English Composition and Rhetoric..... | 1 unit |
| English Classics | 1 unit |
| English Literature | 1 unit |

HISTORY

- B. Two units chosen from the following:
- | | |
|------------------------------|--------------------|
| Civil Government | $\frac{1}{2}$ unit |
| United States History | $\frac{1}{2}$ unit |
| General History | 1 unit |
| Greek and Roman History..... | $\frac{1}{2}$ unit |
| English History | $\frac{1}{2}$ unit |

MATHEMATICS

- C. Three units as follows. No conditions are permitted in Mathematics:
- | | |
|--------------------------------|---------|
| Algebra | 3 units |
| Geometry, Plane and Solid..... | 3 units |

SCIENCE

- D. Two units chosen from the following, including Physics:
- | | |
|--------------------------|--------------------|
| Physics | 1 unit |
| Physical Geography | $\frac{1}{2}$ unit |
| Botany | $\frac{1}{2}$ unit |
| Chemistry | 1 unit |
| Physiology | $\frac{1}{2}$ unit |
| Zoology | $\frac{1}{2}$ unit |
| Geology | $\frac{1}{2}$ unit |
| Astronomy | $\frac{1}{2}$ unit |

FOREIGN LANGUAGE

E. For 1903-04, two units chosen from the following list:

Latin	1 or 2 units
Greek	1 or 2 units
French	1 or 2 units
German	1 or 2 units
Spanish	1 or 2 units

For 1904-1905, four units chosen from the following list, or two units from this group, together with two extra units chosen from Groups A, B, C and D.

Latin	2 or 4 units
Greek	2 or 4 units
French	2 or 4 units
German	2 or 4 units
Spanish	2 or 4 units

ENTRANCE CONDITIONS

No applicant under twenty-one years of age will be admitted to the College of Engineering who is in arrears more than one and one-half units for 1903, and one unit for 1904, and thereafter. No deficiencies are allowed in Mathematics and Physics. Thus for 1903-04 he must have $9\frac{1}{2}$ units out of the 11 required for unconditional admission; and for 1904-05 he must have 12 units out of the 13 required for unconditional admission. An applicant twenty one years of age or over, who is deficient in foreign language training, will be admitted with this deficiency in addition to the units permitted above.

For those who have conditions in foreign language to remove, the following arrangements will be made:

1. Those entering with a partial credit in Latin or Greek will be permitted to make good their deficiency by doing an equivalent amount of work in a modern language in the college. For this work they will receive no college credit.

2. Those twenty-one years of age or over, entering with no training in language, will be permitted to make good their deficiency by beginning a modern language in the college. For this work they will receive no college credit.

REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES

Applicants must not be less than seventeen years of age, and, unless they are over twenty-one years of age, must pass examinations in *Arithmetic* and *Geography*, and must be able to write a business letter or a short theme correct in *Grammar* and *Orthography*; or they must present satisfactory certificates showing that they have successfully pursued these subjects elsewhere. In addition, each applicant under twenty-one years of age must present a letter or certificate showing that he has had at least one year's *practical experience* in some industry related to the course which he wishes to pursue.

Applicants over twenty-one years of age are admitted without examination, and without letter or certificate of practical experience.

ADMISSION TO SPECIAL STUDIES.

Students who desire to pursue special lines of work in this College and do not desire to become candidates for degrees, will be admitted on the conditions as stated on page 69.

ADMISSION TO ADVANCED STANDING

For admission to advanced standing in this College see requirements as stated on page 69.

ADMISSION TO GRADUATE WORK

For admission to graduate work in this College see statement on page 69.

COURSES OF STUDY

REQUIREMENTS

Thesis. As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be filed with the President of the University (dependent upon the approval of the head of the department), on the official blank provided for the purpose, not later than December 15 of the University year in which the degree is sought. The completed thesis must be submitted to the head of the department concerned not later than the second Saturday before Commencement Day.

The accepted thesis—on standard paper—Buckeye bond $8\frac{1}{2} \times 11$ inches, medium weight—typewritten or printed, neatly bound in black cloth, gilt-lettered on first cover with the thesis title, name of author, degree sought and year of graduation—must be filed not later than the Friday preceding Commencement Day.

FIRST YEAR

The work of the first year is the same for all engineering students in courses leading to a degree.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mathematics (31)	5	Mathematics (32)	5	Mathematics (33)	5
Algebra.		Trigonometry.		Analytics.	
Chemistry (7)	5	Chemistry (7)	5	Chemistry (12)	4
Inorganic.		Inorganic.		Quantitative Analysis.	
Modern Language	4	Modern Language	4	Modern Language	4
French, Ger. or Spanish.		French, Ger. or Spanish.		French, Ger. or Spanish.	
Rhetoric (1)	2	Rhetoric (1)	2	Rhetoric (1)	2
Composition.		Composition.		Composition.	
Rhetoric (21)	$\frac{1}{2}$	Rhetoric (21)	$\frac{1}{2}$	Rhetoric (21)	$\frac{1}{2}$
Public speaking.		Public Speaking.		Public Speaking.	
Drawing (27)	2	Drawing (28)	2	Drawing (32)	3
Freehand.		Freehand.		Lettering.	
Drill and Gymnasium.		Drill and Gymnasium.		Drill.	

SUMMER TERM IN SHOPWORK.

Students electing courses named below are required to take Shopwork courses in the summer term as follows:

Chemical Engineering—Shopwork (7) and (11), at the close of the first or second year.

Electrical Engineering — } Two from Shopwork (4), (7) and (11), at the close of
Mechanical Engineering — } the first year.

COURSE IN ARCHITECTURE

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses:

Degree: Civil Engineer in Architecture.

FIRST YEAR

(See page 90)

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (33)	3	Drawing (36)	5	Drawing (37)	5
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Architecture (9)	3	Architecture (10)	3	Architecture (11)	3
History of Architecture.		History of Architecture.		History of Architecture.	
Architecture (12)	2	Architecture (13)	2	Architecture (14)	2
Detail Drawing.		Detail Drawing.		Detail Drawing.	
Drawing (14)	2				
Pen Drawing.					
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls, Kinet's		Kinetics; Hydraulics.	
Architecture (15)	4	Architecture (16)	2	Architecture (17)	4
Designing.		Designing.		Designing.	
Drawing (7)	2	Drawing (40)	2	Drawing (41)	2
Photography.		Clay Modeling.		Clay Modeling.	
Elec. Engineering (6)	2	Elec. Eng. (6) and (7)	4		
Lectures.		Lectures and Lab.			
Architecture (5)	3	Civil Eng. (6)	4	Civil Eng. (19)	5
Decorations, etc.		Stereotomy.		Trusses.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	

FOURTH YEAR

Architecture (18)	4	Architecture (4)	2	Architecture (6)	4
Designing.		Specifications.		Estimates and Supt.	
Civil Eng. (15)	5	Architecture (7)	5	Architecture (19)	4
Masonry.		Heating, Vent., etc.		Designing.	
Mech. Eng. (23)	4	Architecture (21)	2	Architecture (20)	5
Materials of Const.		Designing.		Thesis.	
Geology (2)	5	Geology (6)	3	Civil Eng. (21)	3
General.		Economic.		Surveying.	
		Drawing (18)	3	Drawing (19)	2
		Color Work.		Color Work.	
		Civil Eng. (26)	3		
		Steel Construction.			

THESIS SEE PAGE 90

COURSE IN CERAMICS

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

Degree: Engineer of Mines in Ceramics.

FIRST YEAR

(See page 90)

SECOND YEAR

Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Physics (3)	2	Physics (3)	2	Physics (3)	2
Problems.		Problems.		Problems.	
Ceramics (1)	5	Ceramics (2)	5	Ceramics (3)	5
Laboratory.		Laboratory.		Laboratory.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls, Kinet's.		Kinetics, Hydraulics.	
Ceramics (4)	5	Ceramics (5)	5	Ceramics (6)	5
Raw Materials.		Clay Products.		Clay Products.	
Mine Eng. (4)	5	Ceramics (7)	5	Metallurgy (2)	3
Mine Surveying.		Adv. Chem. Lab.		Mineralogy.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
				Shopwork (11)	3
				Forging.	

FOURTH YEAR

Ceramics (9)	5	Ceramics (10)	5	*Ceramics (11)	5
Manf. of Bodies.		Glasses and Glazes.		Enamels, Colors.	
Metallurgy (4)	5	Ceramics (12)	5	*Ceramics (18)	5
Fuels and Iron.		Cement.		Cement Laboratory.	
Shopwork (4)	3	Ceramics (17)	4	Ceramics (15)	5
Chipping and Filing.		Ceramic Const.		Thesis Work.	
Geology (2)	5	Geology (6)	3	Mech. Eng. (36)	5
General.		Economic.		Laboratory.	
				Drawing (7)	2
				Photography.	

THESIS—See page 90

*Students are to elect Ceramics (11) or (18).

COURSE IN CHEMICAL ENGINEERING

Degree: Bachelor of Science in Chemistry.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

Shopwork Courses (7) 3 and (11) 3 are to be taken in Summer Term, at the end of the First or Second Year.

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (20)	4	Chemistry (20)	4	Chemistry (20)	4
Quantitative.		Quantitative.		Quantitative.	
Chemistry (21)	2	Chemistry (21)	2	Chemistry (21)	2
Inorganic.		Inorganic.		Inorganic.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Drawing (33)	3	Drawing (34)	3		
Projections.		Descriptive Geom.			
Chemistry (31)	2			Metallurgy (2)	3
Stoichiometry.				Mineralogy.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Chemistry (8)	5	Chemistry (9)	5	*Chemistry (9)	5
Organic.		Organic.		Organic.	
Metallurgy (5)	5	Metallurgy (6)	5	*Metallurgy (5)	5
Laboratory.		Assaying.		Laboratory.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls, Kinet's.		Kinetics, Hydraulics.	
Drawing (21)	2	Drawing (22)	2	Drawing (23)	2
Technical.		Technical.		Technical.	
				Mech. Eng. (32)	5
				Power Plants.	

*Students are to elect either Chemistry (9) 5, or Metallurgy (5) 5.

FOURTH YEAR

Chemistry (32)	4	Chemistry (32)	4	Chemistry (15)	4
Industrial.		Industrial.		Sanitary.	
Mech. Eng. (18)	5	Mech. Eng. (18)	5	Mech. Eng. (19)	5
Machine Design.		Machine Design.		Machine Design.	
Elec. Eng. (6)	2	Chemistry (30)	3	Chemistry (30)	3
Lectures.		Physical.		Physical.	
Elec. Eng. (7)	2	*Mech. Eng. (35)	5	Ceramics (16)	5
Laboratory.		Laboratory.		General Principles.	
*Metallurgy (4)	5	*Metallurgy (4)	5		
Fuels and Iron.		General.			
*Ag. Chemistry (4)	5	*Ag. Chemistry (4)	5		
Laboratory.		Laboratory.			
*Chemistry (35)	3				
Rare Elements.					

*Students are to elect Metallurgy (4), two terms; Agricultural Chemistry (4), two terms (see General Catalogue for description of course); Metallurgy (4) first term, and Mechanical Engineering (35); or Chemistry (35) first term, and Mechanical Engineering (35) or Agricultural Chemistry (4) second term.

THESIS—See page 90

COURSE IN CIVIL ENGINEERING

Degree: Civil Engineer.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SECOND YEAR

	Credit hours	Second Term	Credit hours	Third Term	Credit hours
First Term					
Drawing (33)		Drawing (36)	5	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Civil Eng. (1)	6	Civil Eng. (4)	4	Civil Eng. (2)	6
Land Surveying.		Topog. Drawing.		Railroad Surveying.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SUMMER COURSE

Civil Engineering (22) 4 weeks, of 6 days per week. Field work in land and railroad surveying.

THIRD YEAR

Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls; Kinet's.		Kinetics; Hydraulics.	
Civil Eng. (3)	4	Civil Eng. (24)	5	Civil Eng. (7)	5
Topog. Surveying.		C. E. Drawing.		Bridge Stresses.	
Civil Eng. (16)	5	Civil Eng. (6)	4	Drawing (7)	2
Roads and Streets.		Stereotomy.		Photography.	
Astronomy (4)	3	Astronomy (5)	3	Astronomy (6)	4
Mathematical.		Mathematical.		Mathematical.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	

SUMMER COURSE

Civil Engineering (23) 4 weeks, of 6 days per week. Field work in railroad and topographical surveying.

FOURTH YEAR

Civil Eng. (8)	5	*Civil Eng. (17)	5	Civil Eng. (18)	5
Bridge Designing.		Railways.		Water Supply.	
		*Civil Eng. (25)	5		
		Adv. Bridge Work.			
Civil Eng. (15)	5	Civil Eng. (14)	2	Civil Eng. (10)	5
Masonry.		Cement Testing.		Sanitary Eng.	
Elec. Eng. (6)	2	Elec. Eng. (6 and 7)	4		
Lectures.		Lectures and Lab.			
		Mech. Eng. (17)	3	Mech. Eng. (25)	5
Geology (2)	5	Laboratory.		Laboratory.	
General.		Geology (6)	3		
		Economic.			

THESIS—See page 90

*Students are to elect either C. E. (17) or C. E. (25).

COURSE IN ELECTRICAL ENGINEERING

Degree: Mechanical Engineer in Electrical Engineering.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SUMMER TERM

Students are required to take two of the following Courses in Shopwork in the Summer Term at close of First Year: Shopwork (4), (7) and (11).

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Physics (3)	2	Physics (3)	2	Physics (3)	2
Problems.		Problems.		Problems.	
Shopwork (*)	3	Shopwork (13)	3	Physics (5)	4
		Machine Work.		Laboratory.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

*Students are required to take the Shopwork not assigned them in the Summer Term, i. e., Shopwork (4), (7) or (11).

THIRD YEAR

Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls, Kinet's.		Kinetics, Hydraulics.	
Physics (6)	5	Physics (6)	5	Mech. Eng. (32)	5
Laboratory.		Laboratory.		Power Plants.	
Physics (4)	3	Mech. Eng. (3)	5	Mech. Eng. (28)	2
Elect'y, Magnetism.		Mechanism.		Laboratory.	
Shopwork (14)	3	Elec. Eng. (8)	4	Elec. Eng. (9)	4
Machine Work.		D. C. Machinery.		Laboratory.	
Drawing (5)	3			Ind. Arts (7)	3
Technical.				Mach. Design.	

FOURTH YEAR

Elec. Eng. (10)	3	Elec. Eng. (10)	3	Elec. Eng. (13)	5
A. C. Machinery.		A. C. Machinery.		Applications.	
Elec. Eng. (11)	3	Elec. Eng. (11)	3	Elec. Eng. (11)	3
Laboratory.		Laboratory.		Laboratory.	
Mech. Eng. (33)	5	Elec. Eng. (14)	4	Elec. Eng. (14)	4
Engines and Boilers.		Designing.		Designing.	
Mech. Eng. (29)	3	Elec. Eng. (12)	2		
Laboratory.		Transmission.			
		Mech. Eng. (30)	2		
		Laboratory.			
*Elective	3-5	*Elective	3-5	*Elective	3-5

THESIS—See page 90

*Subject to the approval of the Professor of Electrical Engineering.

COURSE IN INDUSTRIAL ARTS

Degree: Bachelor of Science in Industrial Arts.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Physics (3)	2	Physics (3)	2	Physics (3)	2
Problems.		Problems.		Problems.	
Shopwork (7)	3	Shopwork (9)	3	Shopwork (8)	3
Woodwork.		Adv. Pattern Making.		Cabinet Work.	
Shopwork (3)	3	Shopwork (11)	3	Shopwork (12)	3
Foundry.		Forging.		Adv. Forging.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
Economics (2)	3	Economics (3)	3	Economics (4)	3
Industrial Society.		Indus. and Fin. Hist.		Transportation Problems.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (5)	3	Industrial Arts (2)	3	Industrial Arts (2)	3
Technical.		Designing.		Designing.	
Industrial Arts (1)	3	Industrial Arts (1)	3	Industrial Arts (1)	3
Tools and Machines.		Tools and Machines.		Tools and Machines.	
Shopwork (4)	3	Shopwork (13)	3	Shopwork (14)	3
Chipping and Filing.		Machine Work.		Machine Work.	
Metallurgy (4)	5	Metallurgy (4)	2	Mech. Eng. (32)	5
Fuels and Iron.		Steel.		Power Plants.	
Economics (1)	3	Economics (1)	3	Economics (1)	3
Elem. of Polit. Econ.		Elem. of Polit. Econ.		Elem. of Polit. Econ.	
		Mech. Eng. (22)	3		
		Timber and Masonry.			

FOURTH YEAR

Shopwork (15)	3	Shopwork (16)	3	Shopwork (17)	3
Adv. Mach. Work.		Adv. Mach. Work.		Adv. Mach. Work.	
Elec. Eng. (6)	2	Elec. Eng. (6)	2	Civil Eng. (21)	3
Lectures.		Lectures.		Surveying.	
Elec. Eng. (4)	2	Elec. Eng. (7)	2		
Laboratory.		Laboratory.			
Industrial Arts (3)	3	Industrial Arts (3)	3	Industrial Arts (3)	3
Shop Equipment.		Shop Appliances.		Shop Management.	
Industrial Arts (4)	3	Industrial Arts (4)	3	Industrial Arts (4)	3
Adv. Designing.		Adv. Designing.		Adv. Designing.	
Mech. Eng. (12)	2	Mech. Eng. (29)	2	Mech. Eng. (30)	2
Laboratory.		Laboratory.		Laboratory.	
Economics (5)	2	Economics (6)	2	Economics (7)	2
Immigration, Money.		Railroads. Crises, etc.		Labor and Capital.	

THESIS—See page 90

COURSE IN MANUAL TRAINING

Degree: Bachelor of Science in Industrial Arts.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SECOND YEAR

Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Physics (3)	2	Physics (3)	2	Physics (3)	2
Problems.		Problems.		Problems.	
Shopwork (7)	3	Shopwork (9)	3	Shopwork (8)	3
Woodwork.		Adv. Pattern Making.		Cabinet Work.	
Shopwork (3)	3	Shopwork (11)	3	Shopwork (12)	3
Foundry.		Forging.		Adv. Forging.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
Education (1)	3	Education (1)	3	Education (1)	3
Elem. Psychology.		Elem. Psychology.		Elem. Psychology.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Drawing (5)	3	Industrial Arts (2)	3	Industrial Arts (2)	3
Technical.		Designing.		Designing.	
Industrial Arts (1)	3	Industrial Arts (1)	3	Industrial Arts (1)	3
Tools and Machines.		Tools and Machines.		Tools and Machines.	
Shopwork (4)	3	Shopwork (13)	3	Shopwork (14)	3
Chipping, Filing.		Machine Work.		Machine Work.	
History (1)	3	History (1)	3	History (1)	3
U. S. Political.		U. S. Political.		U. S. Political.	
*Chemistry (20)	4	*Chemistry (20)	4	*Chemistry (20)	4
Quantitative.		Quantitative.		Quantitative.	
*Chemistry (21)	2	*Chemistry (21)	2	*Chemistry (21)	2
Physical.		Physical.		Physical.	
*Physics (5)	5	*Physics (5)	5	*Physics (5)	5
Laboratory.		Laboratory.		Laboratory.	

* Students take either Chemistry (20) and (21) or Physics (5).

FOURTH YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Shopwork (15)	3	Shopwork (16)	3	Mech. Eng. (32)	5
Adv. Mach. Work.		Adv. Mach. Work.		Power Plants.	
Elec. Eng. (6)	2	Elec. Eng. (6)	2	Mech. Eng. (28)	2
Lectures.		Lectures.		Laboratory.	
Elec. Eng. (7)	2	Elec. Eng. (7)	2		
Laboratory.		Laboratory.			
Education (5)	3	Education (5)	3	Education (5)	3
Science of Educ.		Science of Educ.		Science of Educ.	
Polit. Science (1)	3				
Polit. Inst. of U. S.					
Electives	2-5	Electives	5-7	Electives	5-7

THESIS—See page 90

COURSE IN MECHANICAL ENGINEERING

Degree: Mechanical Engineer.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SUMMER TERM

Students are required to take *two* of the following Courses in Shopwork in the Summer Term at the close of the First Year: Shopwork (4), (7) and (11).

SECOND YEAR

Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y Magnetism.		Light, Sound.	
Shopwork (3)	2	Physics (7)	2	Physics (7)	3
Foundry.		Laboratory.		Laboratory.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
Shopwork (*)	3	Shopwork (*)	3	Shopwork (13)	3
				Machine Work.	
				Military Drill.	
Drill and Gymnasium.		Drill and Gymnasium.			

*Students are required to satisfactorily pursue before the Third Term, Second Year, Shopwork Courses (4), (7), (9) and (11). In the First Term they will be assigned one of the two subjects not yet taken successfully, and in the Second Term the other; but Shopwork (7) must precede Shopwork (9).

THIRD YEAR

Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls; Kinet's.		Kinetics; Hydraulics.	
Mech. Eng. (12)	2	Mech. Eng. (3)	5	Mech. Eng. (3)	2
Laboratory.		Mechanism.		Mechanism.	
Drawing (5)	3	Mech. Eng. (22)	3	Drawing (7)	2
Technical.		Timber, Masonry.		Photography.	
Metallurgy (4)	5	Metallurgy (4)	2	Civil Eng. (19)	5
Fuels and Iron.		Steel.		Trusses.	
Shopwork (14)	3	Shopwork (15)	4	Mech. Eng. (32)	5
Machine Work.		Adv. Mach. Work.		Power Plants.	
Mathematics (11)	1				
Diff. Equations.					

FOURTH YEAR

Mech. Eng. (33)	6	Mech. Eng. (34)	5	Mech. Eng. (21)	5
Engines and Boilers.		Thermodynamics.		Thesis.	
Mech. Eng. (27)	5	Mech. Eng. (14)	4	Mech. Eng. (15)	3
Laboratory.		Laboratory.		Laboratory.	
Mech. Eng. (18)	5	Mech. Eng. (18)	5	Mech. Eng. (19)	5
Machine Design.		Machine Design.		Machine Design.	
Elec. Eng. (6)	2	Elec. Eng. (6)	2	Industrial Arts (5)	3
Lectures.		Lectures.		Shop Appliances.	
Elec. Eng. (7)	2	Elec. Eng. (7)	2	Mech. Eng. (31)	3
Laboratory.		Laboratory.		Hydraulic Machinery.	

THESIS—See page 90

COURSE IN MINING ENGINEERING

Degree: Engineer of Mines.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

(See page 90)

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (33)	3	Drawing (34)	3	Drawing (35)	3
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (41)	5	Mathematics (42)	5	Mathematics (43)	5
Calculus.		Calculus.		Calculus.	
Physics (2)	3	Physics (2)	3	Physics (2)	3
Mechanics, Heat.		Elect'y, Magnetism.		Light, Sound.	
Metallurgy (5)	5	Metallurgy (5)	5	Metallurgy (5)	5
Laboratory.		Laboratory.		Laboratory.	
Shopwork (7)	2	Shopwork (11)	2	Metallurgy (2)	3
Woodwork.		Forging.		Mineralogy.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Mathematics (71)	5	Mathematics (72)	5	Mathematics (73)	5
Statics.		Strength Mat'ls; Kinet's.		Kinetics; Hydraulics.	
Metallurgy (4)	5	Metallurgy (4)	5	Metallurgy (3)	5
Fuels and Iron.		General.		Deter. Mineralogy.	
Mine Eng. (4)	5	Metallurgy (6)	5	Civil Eng. (19)	5
Mine Surveying.		Assaying.		Trusses.	
Rhetoric (2)	2	Rhetoric (3)	2	Rhetoric (3)	2
Expository Writing.		Brief-Making, etc.		Brief-Making, etc.	
		Mine Eng. (7)	1		
		Surveying.			

FOURTH YEAR

Mine Eng. (5)	5	Mine Eng. (5)	5	Mine Eng. (5)	5
Mine Engineering.		Mine Engineering.		Mine Engineering.	
Geology (2)	5	Geology (6)	3	Mech. Eng. (36)	5
General.		Economic.		Laboratory.	
Metallurgy (8)	2	Metallurgy (7)	3	Mine Eng. (6)	5
Ore Dressing.		Metal. Construction.		Plans and Specifications.	
Elec. Eng. (6)	2	Elec. Eng. (6)	2	Drawing (7)	2
Lectures.		Lectures.		Photography.	
Elec. Eng. (7)	2	Elec. Eng. (7)	2		
Laboratory.		Laboratory.			
		Geology (7)	2		
		Petrography.			

THESIS—See page 90

SHORT COURSES

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (3)	5	Chemistry (3)	5	Chemistry (12a)	5
Inorganic.		Inorganic.		Analytical.	
Physics (1)	5	Physics (1)	5	Geology (1)	5
Elementary.		Elementary.		Phys. Geography.	
Mathematics (1)	5	Mathematics (3a)	5	Shopwork (11)	3
Algebra.		Geometry.		Forging.	
				Shopwork (4)	2
				Chipping, Filing.	
				Military Drill.	
Drill and Gymnasium.		Drill and Gymnasium.			

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Ceramics (1)	5	Ceramics (2)	5	Ceramics (3)	5
Chem. Analysis.		Analysis of Clays.		Analysis of Glazes.	
Ceramics (4)	5	Ceramics (5)	5	Ceramics (6)	5
Raw Materials.		Clay Products.		Clay Products.	
Geology (2)	5	Geology (6)	3	Drawing (11)	5
General.		Economic.		Mechanical.	
		Drawing (27)	2		
		Freehand.			
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SHORT COURSE IN INDUSTRIAL ARTS

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (24)	1	Drawing (25)	1	Drawing (26)	1
Freehand.		Freehand.		Freehand.	
Drawing (2)	3	Drawing (38)	3	Drawing (39)	3
Lettering.		Projections.		Drafting.	
Mathematics (2)	5	Mathematics (2)	5	Mathematics (2)	5
Algebra.		Algebra.		Algebra.	
Mathematics (3)	5	Mathematics (13)	5	Mathematics (14)	5
Plane Geometry.		Space Geometry.		Trigonometry.	
Shopwork (7)	3	Shopwork (9)	3	Shopwork (11)	3
Pattern Making.		Adv. Pattern Making.		Forging.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SECOND YEAR

Industrial Arts (8)	3	Drawing (34)	3	Drawing (35)	3
Machine Drawing.		Descriptive Geom.		Shades, Shadows.	
Industrial Arts (1)	3	Industrial Arts (1)	3	Industrial Arts (1)	3
Tools, Machines.		Tools, Machines.		Tools, Machines.	
Physics (1)	5	Physics (1)	5	Geology (1)	5
Elementary.		Elementary.		Phys. Geography.	
Shopwork (4)	3	Shopwork (13)	3	Shopwork (14)	3
Chipping, Filing.		Machine Work.		Adv. Machine Work.	
Shopwork (3)	2	Industrial Arts (2)	3	Industrial Arts (2)	3
Foundry.		Designing.		Designing.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SHORT COURSE IN MINING

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mathematics (2)	5	Mathematics (2)	5	Mathematics (2)	5
Algebra.		Algebra.		Algebra.	
Mathematics (3)	5	Mathematics (13)	5	Mathematics (14)	5
Geometry.		Space Geometry.		Trigonometry.	
Physics (1)	5	Physics (1)	5	Geology (1)	5
Elementary.		Elementary.		Phys. Geography.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SECOND YEAR

Drawing (2)	3	Drawing (38)	3	Drawing (39)	3
Lettering.		Projections.		Drafting.	
Drawing (27)	2	Geology (4)	5	Shopwork (11)	3
Freehand.		Elementary.		Forging.	
Chemistry (3)	5	Chemistry (3)	5	Metallurgy (9)	5
Inorganic.		Inorganic.		Mineral Chemistry.	
Mine Eng. (1)	5	Mine Eng. (2)	5	Mine Eng. (3)	5
Mine Surveying.		Ventilat. Haulage.		Mine Operating.	
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THE COLLEGE OF LAW

The College of Law offers two courses of study:
The Undergraduate Course.
The Graduate Course.

REQUIREMENTS FOR ADMISSION

Applicants for admission to the College of Law must be at least eighteen years of age.

FOR STUDENTS WHO ARE CANDIDATES FOR A DEGREE.

For *unconditional* admission the student must be prepared to offer the following:

- A. Two units chosen from the following:

English Composition and Rhetoric.....	1 unit
English Classics	1 unit
English Literature	1 unit

- B. Two units chosen from the following:

Civil Government	$\frac{1}{2}$ unit
United States History	$\frac{1}{2}$ unit
General History	1 unit
Greek and Roman History	$\frac{1}{2}$ unit
English History	$\frac{1}{2}$ unit

- C. Three units as follows:

(9) Algebra	3 units
(10) Plane and Solid Geometry.....	3 units

- D. Two units chosen from the following, including Physics:

Physics	1 unit
Physical Geography	$\frac{1}{2}$ unit
Botany	$\frac{1}{2}$ unit
Chemistry	1 unit
Physiology	$\frac{1}{2}$ unit
Zoology	$\frac{1}{2}$ unit
Geology	$\frac{1}{2}$ unit

- E. Four units chosen from the following; or two extra units chosen from the preceding groups, and two units from the following:

Latin	2 or 4 units
Greek	2 or 4 units
German	2 or 4 units
French	2 or 4 units
Spanish	2 or 4 units

The extent and character of the work required in each subject mentioned above is to be found on pages 65-69.

No applicant for admission to the University will be accepted who is deficient or conditioned in required entrance work representing in the aggregate more than one daily recitation for a year. This rule does not apply to the College work indicated as requisite for a degree. Work of collegiate grade may be made up at any time before the Friday preceding Commencement Day.

1. An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

2. A person twenty-one years of age, or over, who desires to pursue a special line of work and does not desire to become a candidate for a degree, may be admitted by vote of the Executive Committee to such classes as he is qualified to enter; provided, that if he afterward become a candidate for a degree he must pass the requirements for admission at least one year before the degree is conferred.

F. In addition to the foregoing requirements for admission to the work of the College, *each candidate for a degree* must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts, Philosophy and Science, of this University.

The following statement of the work done in this University in the first two years of the College of Arts, Philosophy and Science of this University will serve as an illustration of the amount of work of college grade necessary for a degree. Equivalents for any subject will be accepted.

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek or German	4	Greek or German	4
Xenophon		Herodotus, Homer	
Latin or French	4	Latin or French	4
Cicero		Livy, Horace	
Mathematics	3	Mathematics	3
Algebra, Analytics, Calculus		Trigonometry, Analytics, Calculus	
Rhetoric	2½	Rhetoric	2½
Composition		Composition	

One of the following (the choice being for the year):

Botany	3	Botany	3
Botany	4	Zoology	4
Systematic and Physiological		Comparative	
Chemistry	3	Chemistry	3
Inorganic		Inorganic	
Physics	3	Physics	3
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology	3	Zoology	3
Comparative Zoology		Comparative Zoology	

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek or German	4	Greek or German	4
Lysias		Homer, Plato	
History		Economic	
United States		Elementary	
or	4	or	4
Economics		History	
Elementary		United States	
Latin or French	4	Latin or French	4
Horace, Pliny		Tactius, Juvenal	
English Literature	4	Rhetoric	4
Introductory		Analysis of Prose	

The candidate will be subject to examination in such work. Where this work has been done in a college or university of approved standing, the certificate of such college or university will be accepted as a substitute for such examination.

FOR STUDENTS NOT CANDIDATES FOR A DEGREE

Requirements for admission of students who are not candidates for a degree are the same as the requirements for admission of candidates for a degree, except paragraph F.

ADMISSION TO ADVANCED STANDING

Applicants for admission to the Second Year must also present satisfactory evidence of having completed the work of the First Year of the Course in Law, or its equivalent; and applicants for admission to the Third Year must also present satisfactory evidence of having completed the work of the First and Second Years of the Course in Law, or its equivalent.

ADMISSION TO SPECIAL STUDENTS

Persons wishing a knowledge of legal principles *for general business purposes only*, or as a part of a *liberal education*, but not intending to apply for a degree or to take a full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem

expedient, subject in each case to the approval of the Faculty of the work proposed to be undertaken. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitations, etc., with the Dean.

ADMISSION TO GRADUATE WORK

The Graduate course is open to graduates having the degree of Bachelor of Laws (LL.B.) from Colleges or Schools of Law requiring three years' study of law and having a course of study and requirements equivalent to the undergraduate course of study and requirements of this College. Graduates of any Colleges or Schools of Law, and attorneys-at-law who have been regularly admitted to practice law, may also be admitted to this course.

APPLICATIONS FOR ADMISSION FOR DEGREES

At the time of registration all applicants should present their diplomas and certificates of work done. These certificates should state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate on it. A copy of the course study must accompany the certificate in all cases. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request made to the Dean.

THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, not later than the second Saturday before Commencement of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with the approval of the professor giving instruction in that division of law from which the subject is chosen.

The subject of every thesis, with the full name of its author or authors, together with the written approval of it by the head of the department within which it lies, must be filed with the president of the University, on the official blank provided for the purpose, not later than December 15 of the year in which the degree is sought.

All undergraduate theses shall be made on paper of uniform size, 8½ by 11 inches, and of quality and weight equal to that of a sample in the president's office. Theses shall be typewritten or printed, neatly bound in black cloth, and shall be gilt-lettered on the first cover with the thesis title, name of author, degree sought, and year of graduation.

Completed theses must be submitted to the head of the department concerned, not later than the second Saturday before Commencement Day.

A copy of the thesis so prepared and accepted must be filed with the University not later than the Friday preceding Commencement Day.

ADMISSION TO THE BAR

The regular Supreme Court examination for admission to the Bar is held on the first Tuesday in June of each year. Students who have not regularly attended the full course of three years at this College, or who have not been examined here in all the subjects required in the undergraduate course, are required to pass this examination before they can receive the degree of Bachelor of Laws or the certificate mentioned on page 102.

DEGREES

The degree of Bachelor of Laws (LL.B.) will be conferred on all who, being at least twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least that year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other University,

or College, or School of Law requiring three years' study of law and having a course of study and requirements equivalent to the undergraduate course of study and requirements of this College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis, the subject of which has been chosen from the work included in the Graduate year.

CERTIFICATES OF WORK DONE

Those who have completed the studies of this College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

No distinction is made between the candidates for a degree and other regular students while in attendance at this College. The two classes of students do the same work, recite together, take the same examinations, are held to the same standards of work and stand on the same footing for admission to the bar.

The distinction between the two classes of students consists entirely in the two following respects:

First—The standard of admission for candidates for a degree is higher than that for those who are not candidates for a degree.

Second—Candidates for degrees who have fulfilled all the entrance requirements and have completed the course of study in a satisfactory manner receive a diploma conferring the degree. Regular students, who are not candidates for a degree, receive under similar circumstances a formal certificate of the completion of the course.

UNDERGRADUATE COURSE OF STUDY

Degree: Bachelor of Laws.

FIRST YEAR

FIRST SEMESTER.		SECOND SEMESTER.	
	Recitation hours per week		Recitation hours per week
Elementary Law (including Domestic Relations, Status and Personal Property)	15	Agency	2
—	15	Contracts	4
		Criminal Law	3
		Sales	2
		Torts	4
			15

TEXT BOOKS

First Semester—Elementary Law (Robinson, Walker, Tenth edition, and Blackstone and Tiffany's Persons and Domestic Relations.)

Second Semester—Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

FIRST SEMESTER.		SECOND SEMESTER.	
	Recitation hours per week		Recitation hours per week
Bailments	2	Evidence	3
Negotiable Instruments	5	Partnership	2
Evidence	3	Pleading	2
Pleading	4	Real Property	5
Moot Court	1	Wills	2
—	15	Moot Court	1
			15

TEXT BOOKS

First Semester—Bailments (Hale); Negotiable Instruments (Tiedeman, Randall); Evidence (Greenleaf, Sixteenth edition); Pleading (Phillips).

Second Semester—Partnership (Mechem); Real Property (Tiedeman); Wills (Page).

THIRD YEAR

FIRST SEMESTER.		Recitation hours per week	SECOND SEMESTER.		Recitation hours per week
Constitutional Law	3		Corporations (Private)	2	
Corporations (Private)	2		Ethics	2	
Corporations (Municipal)	3		Federal Practice	2	
Equity Jurisprudence	4		Quasi-Contracts	2	
Probate Law	2		Suretyship	2	
Moot Court	1		Trial Practice	2	
	—		Moot Court	1	
	15			—	
				13	

Thesis for graduation to count for two hours through second semester.

TEXT BOOKS

First Semester—Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Elliott); Equity Jurisprudence (Merwin); Probate Law (Kinkead).

Second Semester—Ethics (Sharswood); Quasi-Contracts (Keener); Suretyship (Stearns); Trial Practice (Kinkead).

GRADUATE COURSE OF STUDY.

Degree: Master of Laws.

FIRST GROUP

GENERAL AND COMPARATIVE JURISPRUDENCE

1. General Jurisprudence. Holland and Particular Topics.
One hour a week, second semester.
 2. Comparative Jurisprudence. Roman Law; Outlines.
Two hours a week, first semester.
- History of the Common Law, Pollock & Maitland.
Three hours a week, first semester.

SECOND GROUP

ENGLISH AND AMERICAN CONSTITUTIONAL HISTORY

3. English Constitutional History.
Three hours a week throughout the year.
4. American Constitutional History.
Three hours a week throughout the year.

THIRD GROUP

POLITICAL SCIENCE

5. Public International Law.
6. History of Treaties and Modern Diplomacy.
Five and six, two hours a week throughout the year.
7. American Diplomatic History.*
Three hours a week throughout the year.

FOURTH GROUP

AMERICAN JURISPRUDENCE

8. Private Corporations—Cases.
Two hours a week, first semester.
9. Railroad Law.
One hour a week, second semester.

*7 is included in 4, but may be taken separately.

10. Law of Receivers.
One hour a week, second semester.
11. Insurance.
One hour a week, first semester.
12. Negligence and Damages. Cases, and Jones on Negligence of Municipal Corporations.
One hour a week throughout the year.
13. Cases in Evidence.. Thayer.
One hour a week throughout the year.
14. Cases in Equity.
Two hours a week, second semester.
15. Remedies and Remedial Rights, including Drafting Pleadings and other legal papers; preparation for trial; and Moot Court.
One hour a week throughout the year.
16. Real Property, advanced studies, including examinations of titles and making of abstracts of title.
One hour a week, second semester.
17. Circuit and Supreme Court Practice, and Special Proceedings under the Ohio Code of Civil Procedure.
One hour a week, second semester.
18. Private International Law (Conflict of Laws).
One hour a week throughout the year.

The graduate course may be completed in one or two years, according to the desire of the student, with the permission of the Faculty of this College; but at least one year of residence is required.

Subject to the approval of the Faculty, each graduate student must select a major course of study from some one of the groups of subjects specified in the graduate course of study hereinbefore given, and a sufficient number of minor courses to satisfy the requirements of the Faculty.

The major course must occupy at least three hours a week throughout the year, and the minor courses must occupy at least seven hours a week throughout the year.

Graduate students are permitted to select their minor courses from the undergraduate course of study, by permission of the Faculty.

THE COLLEGE OF PHARMACY

The College of Pharmacy offers two courses of study:
The Four Years' Course.
The Two Years' Course.

REQUIREMENTS FOR ADMISSION

To the Four Years' Course:

For *unconditional* admission the candidate must be prepared to offer:

- A. Two units, as follows:

English Composition and Rhetoric.....	1 unit
English Classics	1 unit
- B. Two units, as follows:

Civil Government	$\frac{1}{2}$ unit
United States History.....	$\frac{1}{2}$ unit
General History	1 unit
- C. Three units, as follows:

Algebra	3 units
Plane and Solid Geometry.....	3 units
- D. Two units, as follows:

Physics	1 unit
Physical Geography	$\frac{1}{2}$ unit
Botany	$\frac{1}{2}$ unit
- E. Two units, chosen from the following:

Latin	2 units
German	2 units

The extent and character of the work required in each subject mentioned above, see pages 65-69.

For the present, the German required for admission may be begun at the University, but without University credits.

No applicants for admission to this College will be accepted who are deficient in required entrance work representing in the aggregate more than two units.

ADMISSION TO THE SHORT COURSE

Applicants, unless over twenty-one, must pass an examination in *Arithmetic*, *Geography*, *Grammar* and *United States History*, or bring high school or other certificates for those branches. The requirements for English Grammar in the Short Course may be met by writing a business letter or theme on some practical subject. Applicants who are over twenty-one are admitted without examination.

ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in the University, and do not desire to become candidates for degrees, will be admitted on the conditions as stated on page 69.

ADMISSION TO ADVANCED STANDING

For admission to advanced standing in this College see requirements as stated on page 69.

ADMISSION TO GRADUATE WORK

For admission to graduate work in this College see statement on page 69.

LONG COURSE

Degree: Bachelor of Science in Pharmacy.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

	Credit hours		Credit hours		Credit hours
First Term		Second Term		Third Term	
Chemistry (7)	5	Chemistry (7)	5	Chemistry (12)	4
Inorganic.		Inorganic.		Qualitative Analysis.	
Latin (26)	4	Latin (26)	4	Latin (26)	4
Pharmaceutical.		Pharmaceutical.		Pharmaceutical.	
or		or		or	
German (1)	4	German (1)	4	German (1)	4
Elementary.		Elementary.		Elementary.	
Mathematics (31)	5	Mathematics (32)	5	Mathematics (33)	5
College Algebra.		Trigonometry.		Plane Analytics.	
Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½	Rhetoric (1) and (21)	2½
Paragraph Writing.		Theme Writing.		Prose Analysis.	
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical		Hygiene and Physical		Hygiene and Physical	
Training (women)		Training (women)		Training (women)	

SECOND YEAR

Botany (3)	4	Botany (4)	2	Metallurgy (2)	3
Systematic, Physiological.		Medical.		Mineralogy.	
Chemistry (20)	4	Chemistry (20)	4	Chemistry (20)	4
Quantitative Analysis.		Quantitative Analysis.		Quantitative Analysis.	
German (2)	2	German (2)	2	German (2)	2
Scientific Reading.		Scientific Reading.		Scientific Reading.	
Pharmacy (6)	3	Pharmacy (7)	5	Pharmacy (8)	5
General Processes.		U. S. Pharmacopoeia.		Dispensatories, etc.	
Physics (11)	3	Physics (11)	3	Physics (11)	3
General Physics.		General Physics.		General Physics.	
Chemistry (21)	2	Chemistry (21)	2	Chemistry (21)	2
Advanced Inorganic.		Advanced Inorganic.		Advanced Inorganic.	
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical		Hygiene and Physical		Hygiene and Physical	
Training (women)		Training (women)		Training (women)	

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Pharmacy (9)	5	Pharmacy (10)	5	Pharmacy (11)	5
General Processes.		Prescriptions.		Dispensatories, etc.	
Pharmacy (12)	3	Pharmacy (13)	3	Pharmacy (14)	3
Materia Medica.		Materia Medica.		Mat. Medica and Thera.	
Physiology (1)	3	Physiology (1)	3	Physiology (1)	3
Human Anatomy.		Physiology.		Physiology.	
Bacteriology (1)	2	Bacteriology (1)	2	Physiology (5)	2
				Microscopy.	
Chemistry (8)	5	Chemistry (9)	5	Chemistry (9)	5
Organic.		Organic.		Organic.	

FOURTH YEAR

Geology (2)	5	Geology (6)	3	Chemistry (11)	4
General.		Economic.		Toxicology.	
Pharmacy (15)	5	Pharmacy (16)	5	Pharmacy (17)	5
Assaying.		General.		General.	
Thesis.		Thesis.		Thesis.	

Elective, eight or, by special permission of the Professor of Pharmacy, nine hours through the year—five hours of which in either case must be chemistry.

SHORT COURSE

On the satisfactory completion of this course the student is granted a certificate of "Pharmaceutical Chemist."

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement in Courses.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (3)	5	Chemistry (3)	5	Chemistry (12a)	4
Inorganic.		Inorganic.		Qualitative Analysis.	
Latin (26)	4	Latin (26)	4	Latin (26)	4
Pharmaceutical.		Pharmaceutical.		Pharmaceutical.	
Physics (1)	5	Physics (1)	5	Botany (1)	5
Elementary.		Elementary.		Elementary.	
Pharmacy (6)	3	Pharmacy (7)	5	Pharmacy (8)	5
General Processes.		U. S. Pharmacopoeia.		Dispensatories, etc.	
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical		Hygiene and Physical		Hygiene and Physical	
Training (women)		Training (women)		Training (women)	

SECOND YEAR

Pharmacy (12)	3	Pharmacy (13)	3	Pharmacy (14)	3
Materia Medica.		Materia Medica.		Mat. Medica and Thera.	
Chemistry (34)	5	Chemistry (34)	5	Chemistry (11)	4
Organic.		Organic.		Toxicology.	
Pharmacy (9)	5	Pharmacy (10)	5	Pharmacy (11)	5
Phar. Chemistry.		Prescription Practice.		Dispensing Practice.	
Physiology (2)	3	Pharmacy (18)	3	Physiology (5)	2
		Pharmacognosy.		Microscopy.	
Bacteriology (1)	2	Bacteriology (1)	2	Pharmacy (19)	3
				Pharmacognosy.	
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical		Hygiene and Physical		Hygiene and Physical	
Training (women)		Training (women)		Training (women)	

COLLEGE OF VETERINARY MEDICINE

REQUIREMENTS FOR ADMISSION TO VETERINARY COLLEGE.

Applicants for admission to the College of Veterinary Medicine must be at least seventeen years of age.

I. For applicants for certificate of Veterinary Surgeon: Arithmetic, Geography and Grammar.

II. For applicants who intend to become candidates for the degree of Doctor of Veterinary Medicine:

For *unconditional* admission the candidate must be prepared to offer, besides Arithmetic, Geography and Grammar:

- A. One unit:
English Composition and Rhetoric..... 1 unit
- B. One-half unit:
United States History..... $\frac{1}{2}$ unit
- D. Two units:
Physics 1 unit
Physical Geography $\frac{1}{2}$ unit
Botany $\frac{1}{2}$ unit
- E. One unit, chosen from the following:
Latin 1 unit
German 1 unit

The extent and character of the work required in each subject mentioned above is to be found on page 69.

ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in this College will be admitted on the conditions as stated on page 69.

ADMISSION TO ADVANCED STANDING

For admission to advanced standing in this college see requirements as stated on page 69.

COURSE IN VETERINARY MEDICINE

The course of study, depending upon the subjects offered for admission, leads to

- (a) the Degree of Doctor of Veterinary Medicine (D. V. M.) or to
- (b) a Certificate of Veterinary Surgeon (V. S.)

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1)	5	Agr'l Chemistry (8)	5	Physiology (14)	3
Principles.		Organic.		Physiology.	
Physiology (4)	5	Physiology (14)	3	Physiology (4)	5
Histology.		Physiology.		Phys. Chemistry.	
Veterinary Med. (11)	10	Physiology (4)	5	Veterinary Med. (13)	10
Anatomy.		Histology.		Anatomy.	
		Veterinary Med. (12)	10	Bacteriology (4)	3
		Anatomy.		Bacteriology.	
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Physiology (14)	3	Pharmacy (13)	5	Pharmacy (18)	5
Physiology.		Materia Medica.		Laboratory.	
Pharmacy (12)	5	Veterinary Med. (15)	5	Veterinary Med. (16)	5
Materia Medica.		Theory and Practice.		Theory and Practice.	
Veterinary Med. (14)	5	Veterinary Med. (18)	3	Veterinary Med. (18)	3
General Pathology.		Surgical Diseases.		Surgical Diseases.	
Veterinary Med. (19)	3	Veterinary Med. (19)	3	Veterinary Med. (19)	3
Clinic.		Clinic.		Clinic.	
Veterinary Med. (24)	2	Veterinary Med. (34)	3	Veterinary Med. (34)	3
General Surgery.		Pathology Laboratory.		Pathology Laboratory.	
Veterinary Med. (37)	5				
Anatomy.					
Cadet Service.		Cadet Service.		Cadet Service.	

THIRD YEAR

Veterinary Med. (21)	5	Veterinary Med. (25)	3	Veterinary Med. (22)	3
Theory and Practice.		Practice in Operating.		Therapeutics.	
Veterinary Med. (19)	3	Veterinary Med. (19)	3	Veterinary Med. (19)	3
Clinic.		Clinic.		Clinic.	
Veterinary Med. (18)	3	Veterinary Med. (27)	3	Veterinary Med. (23)	5
Surgical Diseases.		Meat Inspection.		Obstetrics.	
Agriculture (18)	1	Veterinary Med. (31)	5	Veterinary Med. (18)	3
Milk Inspection.		Canine Diseases.		Surgical Diseases.	
Veterinary Med. (26)	3	Agriculture (40)	5	Veterinary Med. (33)	2
Horse Shoeing.		Zootechny.		Ophthalmology.	
Veterinary Med. (36)	3				
Pathology Laboratory.					

Departments of Instruction

Departments of Instruction

1903-1904

AGRICULTURE

Townshend Hall

ZOOTECCHNY AND RURAL ECONOMICS

PROFESSOR HUNT, PROFESSOR PLUMB, MR. RUHLEN.

28. **Breeds of Live Stock.** First term. Lectures and recitations upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum in scoring and judging live stock. Four and one-half hours credit. Sec. I: M., Tu., W., 8 and F., 1 to 4. Sec. II: M., Tu., F., 11 and W., 1 to 4.
29. **Breeds of Live Stock.** Second term. Lectures and recitations upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum in scoring and judging live stock. Four and one-half hours credit. Sec. I: M., Tu., W., 8 and F., 1 to 4. Sec. II: M., Tu., F., 11 and W., 1 to 4.
30. **Principles of Breeding.** Third term. Lectures and recitations upon the laws of heredity and their practical applications. Practicum in scoring and judging live stock and in writing and tracing pedigrees, illustrating methods and studying inheritance. Four and one-half hours credit. Sec. I: M., Tu., W., 8 and F., 1 to 4. Sec. II: M., Tu., F., 11 and W., 1 to 4.
31. **Stock Feeding.** First term. Lectures and recitations upon the laws of nutrition, the character of food stuffs, and the methods of feeding different kinds of domestic animals. Considerable practice is given in calculating digestibilities, nutritive ratios, and feeding standards. Four hours credit. M., Tu., Th., F., 10.
32. **Hygiene and Management.** Second term. Lectures and recitations upon the principles of hygiene and their application to the management of domestic animals. Four hours' credit. M., Tu., Th., F., 10.
40. **Stock Feeding and Hygiene.** Second term. Lectures and recitations upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quantity of food to produce given effects. Considerable practice is given in calculating digestibilities, nutritive ratio and feeding standards. For students in veterinary medicine. Five hours' credit.
14. **Animal Mechanics and Exterior.** First term. Lectures and recitation upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum in measuring animals and testing the value of given measurement for given purposes. Four and one-half hours credit. Not to be given in 1903-1904.

26. **Live Stock Markets and Commerce.** Second term. Lectures and recitations upon the methods of preparing and shipping stock to local and distant markets; of the various available markets and the relationship of prices to grades of stock; of stock-yard and packing-house methods; of export trade and methods of shipping abroad, etc. Practicum making up comparative market reports and inspecting transportation agencies, stock yards and packing houses. Four and one-half hours' credit. Not to be given in 1903-1904.
27. **Wools and Other Animal Fibers.** Third term. Lectures and recitations upon the sources of supply of wools and other animal fibers, methods of shearing, market classification, preparation and shipping, relative values of fibers of breeds and crosses. Practicum in shearing, classifying wools, making laboratory study of fibers, etc. Four and one-half hours' credit. Not to be given in 1903-1904.
16. **History of Agriculture and Rural Economics.** Third term. Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems. Four hours' credit. M., Tu., Th., F., 10.
5. **Dairy Farming.** Second term. Lectures upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms. Practicum in scoring and judging live stock, writing pedigrees and calculating feeding standards. Three hours' credit. W., F., 8 and S., 10 to 12.

AGRONOMY AND FARM EQUIPMENT

PROFESSOR HUNT, MR. MILLER.

11. **Farm Equipment.** First term. Lectures and recitations upon selecting, planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. Four and one-half hours' credit. M., Tu., W., 9 and Th. or F., 1 to 4.
12. **Soils.** Second term. Lectures and recitations upon the origin, formation, kinds and physical properties of soils and their improvements by cultivation, fertilization, drainage and irrigation. Practicum in laboratory testing physical properties of several soils; determining the relation of soils to heat, moisture, air and fertilizers, and making mechanical analyses. Four and one-half hours' credit. M., Tu., W., 9 and W., Th. or F., 1 to 4, or S., 8 to 11.
13. **Farm Crops.** Third term. Lectures and recitations upon the history, production, marketing, cultivation and harvesting of farm crops. Practicum with growing and dried specimens of crops, including grasses, clovers and other forage crops. Four and one-half hours' credit. M., Tu., W., 9 and Th. or F., 1 to 4.
19. **Agronomy.** First term. Lectures and recitations on the physical properties of soils; the relation of soils to heat, air and moisture; the effect of fertilizers on soil structure and fertility; consideration of practical methods of tillage as affecting crop producing power of the soil; laboratory and field experiments in physical properties of soils; mechanical analysis of soils with instructions in the methods of work in the Bureau of Soils of the United States Department of Agriculture. Five hours' credit. Th., F., 9 and M., Tu., 1 to 4.

This course must be preceded by course (12).

20. **Agronomy.** Second term. Lectures and recitations upon the methods and character of experiment station work and upon the results in plant

breeding, especially as relates to field crops. Seminars upon the best methods of crop production, including a detailed study of experimental results with one or more field crops. Five hours credit. Th., F., 9 and M., Tu., 1 to 4.

This course must be preceded by course (13).

21. **Rural Engineering.** Third term. Lectures, recitations and practicum on: (a) Laying out the farm, including location of buildings and works; division of the farm into fields and yards, and the survey and measurement of the same; (b) Construction of buildings and works, including water supply, drains, sewage system, and roads; (c) The construction and use of farm machinery, including the application of mechanical principles in its structure and operation. Special attention will be given to comparisons and tests of various makes and kinds of farm machinery. Five hours' credit. Th., F., 9 and M., Tu., 1 to 4.

This course must be preceded by course (11).

DAIRYING

PROFESSOR DECKER, MR. HERRICK, MR. CROWNER, MR. MANGOLD.

6. **Butter Making and Cheese Making.** Second term. Practice four afternoons each week in testing milk as to purity, content of butter fat; in the use and care of centrifugal separators of different makes and other creamery and dairy devices; and in the making of butter and cheese by the most improved methods. The student is required to follow the milk from the time it enters the laboratory until the finished product leaves it, and to determine the points in the process where losses occur and the reasons therefor. Six hours' credit. M., Tu., W., Th., 1 to 5.
7. **Butter Making and Cheese Making.** Second term. Lectures and recitations on methods of creaming; factors which control the thoroughness of the separation of cream, and the manufacture of butter and cheese and sanitary milk supply. Two hours' credit. Tu., Th., 8.
22. **Elements of Dairying.** First term or third term. Lectures and laboratory work. Five hours' credit. W., Th., 11 and M., Tu., 1 to 4 or F., 1 to 4 and S., 8 to 11.
15. **Butter Making.** Second term. Lectures and laboratory work. Five hours' credit. W., Th., 11 and F., S., 1 to 4.

This course must be preceded by course (22).

25. **Cheese Making.** Third term. Lectures and laboratory work. Five hours' credit. W., Th. and M., Tu., 1 to 4 or F., 1 to 4 and S., 8 to 11.

This course must be preceded by course (22).

18. **Milk Inspection.** First term. One lecture or laboratory period a week. One hour credit. Required in the course in Veterinary Medicine.
34. **Advanced Dairying.** Elective three terms. Seminar and laboratory work. A study of experiment station work and other dairy literature with experiments in laboratory to verify statements found. Practice in producing fancy dairy products. Two hours credit.
33. **Household Dairying.** Third term. This course will treat of the composition and nature of milk and its products, their purity and adulterations and their physical and chemical properties in cookery. Two hours credit. Elective in the course in Domestic Science.
41. **Dairy Lectures.** Two hours credit. Ripening of cream, fermentation tests, manufacture of fancy products and factory management.

42. **Dairy Laboratory.** Four half days per week. The manufacture of butter and cheese and fancy dairy products.

6, 7, 41 and 42 are subjects pursued by the special dairy students in the winter term.

AGRICULTURAL CHEMISTRY

Townshend Hall, Rooms 29, 30, 34 and 35.

PROFESSOR WEBER, ASSOCIATE PROFESSOR VIVIAN, MR. HIRSCH.

10. **Principles of Chemistry and Chemical Nomenclature.** First term. Lecture and recitations upon elementary inorganic chemistry and laboratory experiments with the elements studied in class, using McPherson's Laboratory Note Book as a guide. Six hours credit. Recitations, M., W., F., 9; Laboratory, Sec. I: M., Tu., 1 to 4; Sec. II: M., W., 1 to 4; Sec. III, W., F., 1 to 4.
11. **Principles of Chemistry and Chemical Nomenclature.** Second term. Lectures and recitations upon elementary inorganic chemistry. Laboratory work during first half of term continuation of first term; second half qualitative analysis, using Weber's Select Course in Qualitative Analysis as a guide. Six hours credit. Recitations, M., W., F., 9; Laboratory, Sec. I: M., Tu., 1 to 4; Sec. II: M., W., 1 to 4; Sec. III: Tu., W., 1 to 4.
12. **Organic Chemistry.** Third term. Lecture and recitations upon elementary organic chemistry and laboratory work in quantitative analysis, using Weber's Select Course in Qualitative Analysis as a guide. Six hours credit. Recitations, M., W., F., 9; laboratory, Sec. I, M., Tu., 1 to 4; Sec. II, M., W., 1 to 4; Sec. III, W., F., 1 to 4.
1. **Elements of Inorganic Chemistry.** First term. Lectures and recitations upon non-metals and laboratory experiments with the elements studied in class, using McPherson's Laboratory Note Book as a guide. Six hours credit. Tu., Th., F., 10 and M., W., 1 to 4.
8. **Elements of Organic Chemistry.** Second term. Lectures and recitations during first half of term upon metals of agricultural interest; during second half of term lectures upon the simpler organic compounds of agricultural interest. Laboratory work during first half of term continuation of first term; second half qualitative analysis, using Weber's Select Course in Qualitative Analysis as a guide. Six hours credit. Tu., Th., F., 10 and M., W., 1 to 4.
9. **Application of Chemistry to Agriculture.** Third term. Lectures and recitations embrace the following topics: Ingredients of plants, organic and inorganic, essential and non-essential; sources of plant food, air and soil; nature of soil, mechanical portion, nutritive portion, assimilable and reserve plant food; soil exhaustion and amelioration; barnyard manure, its sources, composition and preservation, commercial fertilizers, their rational use and methods of determining the needs of soils, feeding stuffs and feeding rations. Laboratory work consists of qualitative analysis, using Weber's Select Course in Qualitative Analysis as a guide. Six hours credit. Tu., Th., F., 10 and M., Tu., 1 to 4.
4. **Lectures and Laboratory.** Three terms. Lectures on the industries related to agriculture, as the manufacture of sugar from cane, sorghum and beets; the manufacture of starch, glucose and dextrine; the nature and manufacture of vinegar, as fruit, malt and distilled vinegar; the manufacture of alcohol, malt liquors and wines. Laboratory practice Monday and Tuesday afternoons or Thursday and Friday afternoons, and Thursday 8-10 A. M., consists of the official methods of analyzing fertilizer, feeding stuffs, milk, butter and cheese; the analysis of sugar, syrup and sugar producing plants, as beets; determination of cane sugar and milk sugar by means of the polariscope. The analysis of flour, fruits, vegetables, condiments, etc. The analysis of vinegar, as

cider, malt and distilled vinegar; the analysis of spirituous and fermented liquors. Five hours credit. Students of other departments may also elect three hours through the year in this course. For students in the courses in Agriculture and Horticulture and Forestry: Recitation, F., 8; Laboratory, M., Tu., 1 to 4; Th., 8 to 10; in Domestic Science, recitation, Tu., 9; Laboratory, Th., 8 to 10, Th., F., 1 to 4.

- 6 **Laboratory.** Three terms. The work of this course consists of the complete sanitary analysis of water, for which a special room detached from the main laboratory has been fitted up; the complete analysis of soils; the various official methods of determining nitrogen, potash and phosphoric acid; the analysis of oils and fats; complete analysis of grain; the analysis of tea and coffee; the examination of foods, syrups, spices, condiments, flavoring extracts for adulteration; also any work of previous courses, which for lack of time, may not have been completed. Four hours credit. May be elected as a three or five-hour credit. Th., 10 and W., Th., 1 to 4.
7. **Chemistry of Milk and Milk Testing.** Second term. For dairy students. The lectures include a short course in elements of chemistry. The laboratory work covers the following manipulations: The Babcock method of determining fat in pure milk, skimmed milk, cream, sour milk and cheese; the testing of instruments (milk bottles, lactometers, etc.). The calculation of the composition of milk by Fleischman and Babcock formulæ; the determination of preservatives in milk; the detection of artificial colors in butter and oleomargarine, etc. Four hours credit. W., Th., 11, F., 2 to 4, S., 8 to 10.
13. **Applications.** Three terms. Lectures and recitations upon applied chemistry. Laboratory work in qualitative analysis. Five hours credit. For students in Courses in Agriculture, Tu., 9 and M., Th., F., 1 to 4; in Horticulture and Forestry, Tu., 9 and M., W., F., 1 to 4; in Domestic Science, M., W., 11 and Th., F., 1 to 4.

This course will not be given until 1904-1905.

14. **Advanced.** Three terms, optional. Lectures on industries allied to agriculture. Laboratory work consists of official methods of analysis, sanitary and complete water analysis, etc. Four hours credit. Recitation, F., 8; Laboratory, first and second term, M., Th., 1 to 4; third term, Th., 1 to 4, S., 8 to 11.

AMERICAN HISTORY AND POLITICAL SCIENCE

University Hall, Rooms 27, 18 and 48.

PROFESSOR KNIGHT, ASSISTANT PROFESSORS SMITH AND TUTTLE.

I American History

The courses in American history are of four classes: (a) introductory (course 1), designed as a general foundation course in American political and social history; (b) advanced, (courses 2, 4, 6, 7) designed to cover distinct periods or phases of American historical development; (c) special, (courses 8, 9, 10, 12, 13) involving the deeper study of special subjects or movements, and designed to train and employ the student's faculty of investigation; and (d) a teacher's course, (course 11).

Course 1 must precede all other courses and should therefore be taken in either the first or the second year. After this is completed students may elect at their pleasure from the courses in the advanced group (courses 2, 4, 6, 7), but it is desirable that election should be made for an entire year and not for single terms. Students who intend to go far with their studies in American history should take English history (European history 14) early in their course. American history 8 and 9 may be taken in connection with any of the above advanced group, but other courses of the special group are open only to fourth year and graduate students.

1. **Political History of the United States*** A general course covering the political and social history from the earliest colonial times to the present. Text-books, prescribed readings and topical reports. Thwaites's *The Colonies*; Hart's *Formation of the Union*; Wilson's *Division and Reunion*. Three hours credit, throughout the year. Sec. I: M., W., F., at 8; Sec. II: M., W., F., at 9; Sec. III: M., W., F., at 1. Assistant Professor Tuttle.

This must precede all other courses in American history.

2. **The Formation of the United States, 1600-1820.** An advanced course covering the political and institutional development of the colonies and the establishment of a federal union. First term, the colonies 1600-1774; second term, revolution and constitution-making, 1774-1789; third term, the development of democratic national and state governments, 1789-1820. Lectures, reading and reports. Three hours credit throughout the year. M., W., F., at 2. It is desired that this course be preceded or accompanied by *European History 14* or *4*. Assistant Professor Smith.
4. **The Slavery Struggle and Its Results, 1800-1885.** An advanced course comprising a study of the development and downfall of slavery in the United States, and its relation to and influence upon government, legislation and political organization. First term, development and status until the Compromise of 1850; second term, secession and civil war, 1850-1865; third term, reconstruction and its effects, 1865-1885. Lectures, readings and special reports. Three hours credit, throughout the year. Professor Knight.

Given biennially. Not offered in 1903-1904.

6. **American Diplomacy, Foreign Relations and Expansion.** An advanced course comprising an historical study of the foreign relations, problems, and policy of the United States, including the acquisitions of territory and their effects on our institutions and government. Lectures, readings and special reports. Three hours credit, throughout the year. M., W., F., at 11. Professor Knight.
7. **History of Political Parties, 1774-1900.** A detailed study of the origin, development and structure of political parties in the United States with particular attention to their social composition, geographical distribution, organization and political methods. First term, the Federalist and Republican parties, 1774-1820. Second term, Jacksonian Democracy, Whigs and Republicans, 1820-1860. Third term, the present parties, 1860-1900. Lectures, parallel reading, quizzes and reports. Three hours credit throughout the year. Assistant Professor Smith.

Given biennially. Not offered in 1903-1904.

8. **Historical Material and Its Use.** Lectures on elementary historical bibliography and the use of American historical documents, with practical exercises. Especially designed for students intending to do advanced work in American history and political institutions. One hour credit, first and second terms. W., at 3. All students specializing in American history and political science should take this course and the one following. Assistant Professor Tuttle.
9. **Topical Research in American History.** The preparation of special topics on the basis of the work of course 8. One hour credit, third term. W., at 3. Assistant Professor Tuttle.

Open to those who have had course 8.

10. **Seminary for Research Work in American History and Political Science.** Two hours credit (at one meeting), three terms. M., 3 to 5. Professor Knight, Assistant Professor Smith.

Open on permission of the head of the department to those who have had two courses in American history (in addition to American history 8-9), and at least one course in political science.

11. **The Teaching of American History.** A course in methods of teaching American history, especially in the secondary schools, designed for advanced students preparing themselves as teachers and expecting to ask this department for recommendation as to their qualifications. One hour credit, second and third terms. Tu., at 8. Professor Knight, Assistant Professors Smith and Tuttle.
12. **Graduate Seminary in American History and Institutions.** Some limited field will be made in the subject of co-operative study each year by the seminary. So far as possible the investigation will be in the sources. The subject for 1902-1903 was the Revolutionary Period, and that for 1903-1904 will probably be a continuation of the same, with special reference to the diplomatic history from 1776 to 1800. Two hours credit, three terms. Hours to be arranged. Professor Knight.
Open only to graduate students.
13. **Graduate Courses.** Under this number courses are arranged at the beginning of the year to meet the needs of individual students desiring to pursue graduate work in American history. Professor Knight.

II Political Science

The work in political science should be begun with course 1, but some other courses may be taken in connection with it. The order in which the other courses should be taken will vary according to the student's historical training. In all cases the work is closely dependent upon historical knowledge, the amount and kind varying for different courses. So far as possible a suggestion on this point is given below in connection with each course.

1. **Modern Political Institutions.** Introductory course in political science, comprising a study of the political and administrative systems of leading countries with particular reference to their actual operation. First term, the United States government and the state governments. Second term, England, France, Italy and countries with government of the parliamentary form. Third term, German, Swiss and other federations. Lectures, quizzes, parallel readings and reports. Bryce, American Commonwealth, and A. L. Lowell, Government and Parties in Continental Europe, cover the ground of this course. Woodrow Wilson, The State is an alternative. Three hours credit, throughout the year. M., W., F., at 9. Assistant Professor Smith.
Prerequisite: American History 1, or European History, 1 or 14.
4. **International Law.** A study of public international law. Text book and lectures. Lawrence's Principles of International Law. Two hours credit, first and second terms. Tu. and Th., at 10. Professor Knight. Open to those who have had one course in European History and one course in American History.
5. **History of Treaties and Modern Diplomacy.** A study of the leading treaties of modern times, with special reference to their bearing on international law and the political relations of the leading nations. Lectures accompanied by collateral reading and special reports. Two hours credit, third term. Tu., Th., at 10. Professor Knight.
Course 5 must be preceded by course 4, with which it forms a year's consecutive work.
6. **The Government of Dependencies.** A study of the government of dependencies by the home country, and of the political and legal relations between them. Lectures, assigned reading and special reports. Two hours credit, first term. Tu., Th., at 11. Professor Knight.
7. **Colonial Institutions.** A study of local institutions, civil service and administration, and the development of local self-government in the leading colonies of to-day. Lectures, assigned reading, and special reports. Two hours credit, second term. Tu., Th., at 11. Professor Knight.
Course 7 must be preceded by course 6.

8. **Municipal Government.** A study of the development, status and government of modern municipalities, and a comparative study of recent American municipal charters. Lectures, collateral reading and special reports. Two hours credit, third term. Tu., Th., at 11. Professor Knight.
9. **Origin and Development of the United States Constitution.** An historical study of the origin, in English, colonial and state institutions, of the constitution and its development by interpretation and exposition by the Supreme Court in selected leading cases. Lectures, assigned reading, discussions and special reports. Two hours credit, three terms. Tu., Th., at 2. Assistant Professor Tuttle.
10. **Theories of Government, Sovereignty and Political Liberty.** An introductory survey of the origins of political theories, followed by an historical study of the political doctrines expressed in American constitutions and a critical examination of these doctrines in the light of recent European and American thought. Lectures, reports and discussions. Two hours credit, throughout the year. Tu., Th., at 9. Assistant Professor Smith.
Open to graduates and qualified undergraduates who have obtained the instructor's permission.
12. **Comparative Politics.** A study of parties and political methods in legislation, administration and elections in the United States, Great Britain and its colonies, France, Germany, and the leading European countries. Lectures, quizzes, parallel reading and reports. Two hours credit, throughout the year. M., F., at 10. Assistant Professor Smith.
Open only to those who have taken Political Science 1.
13. **Administrative Law.** The general principles of administrative law, with a special study of administration in America. Two hours credit throughout the year. Tu., Th., at 10. Assistant Professor Tuttle.
14. **Roman Law.** Constitutional and Private Law. Two hours credit throughout the year.
Not offered in 1903-1904.

ANATOMY AND PHYSIOLOGY

Biological Hall, Rooms 12 and 20

PROFESSOR BLEILE, MR. DRESBACH, MR. SEYMOUR.

1. **Human Anatomy and Physiology.** Lectures, recitations and laboratory work. Three hours credit. First, second and third terms. This course must be preceded or accompanied by a course in chemistry. Sec. I, M., W., F., at 8. Mr. Dresbach. Sec. II: M., W., F., at 10. Professor Bleile.
2. **General Physiology.** First term. Lectures, recitations and demonstrations. Three hours credit. M., W., F., 9. Mr. Dresbach.
3. **Chemical Physiology.** Three hours credit. Third term. M., Tu., W., 1 to 4. Professor Bleile.
4. **Histology and Histo-Chemistry.** Five hours credit through the year. M., Tu., W., 1 to 4. Professor Bleile, Mr. Dresbach, Mr. Seymour.
The work of this course is also offered in the summer by Mr. Dresbach, beginning June 29th and continuing six weeks.
5. **Microscopy and Urinary Analysis.** Lectures and laboratory work. Two hours credit. Third term. Hours to be arranged. Professor Bleile, Mr. Dresbach. M., Tu., 9-10.

9. **Physiological Laboratory.** Three hours credit, three terms. Laboratory hours to be arranged. Professor Bleile.
11. **Physiological Laboratory.** Five hours credit, three terms. Hours to be arranged. Professor Bleile.
14. **Comparative Physiology.** Lectures and recitations. Three hours credit. Second, third and first terms. This course must be preceded or accompanied by a course in chemistry. Professor Bleile.

ANCIENT ART

(See Greek Language and Literature.)

ARCHITECTURE AND DRAWING

ARCHITECTURE

PROFESSOR BRADFORD, ASSOCIATE PROFESSOR FRENCH.

4. **Specifications.** Lectures and practice in preparing Specifications for Architectural Structures. Two hours credit. (Course in Architecture, fourth year, second term, Tu., 11, W., 1-3.) Professor Bradford.
5. **Decoration and Ornament.** Lectures on the different styles of carved ornaments and decorative color. The practice part of this subject will be incorporated in the Clay-Modeling and Designing. Three hours credit. (Course in Architecture, third year, first term, M., W., 9; F., 9-11.) Professor Bradford.
6. **Estimates and Superintendence.** Lectures and practice in preparing estimates for structures designed in Courses 11, 12, 13 and 21, and the duties of superintendence. Four hours credit. (Course in Architecture, fourth year, third term, M., W., 8. W., 1-5.) Professor Bradford.
7. **Heating, Ventilating and Plumbing.** Lectures and experimental work. Lectures on the principles and methods of heating and ventilating and of sanitary plumbing. Experimental work is carried on with the heating and ventilating plants in the different University buildings. Five hours credit. (Course in Architecture, fourth year, second term, M., W., F., 8. M., Tu., 1-3.) Professor Bradford.
9. **History of Architecture.** Lectures illustrated by lantern slides. Three hours credit. (Course in Architecture, second year, first term, M., W., F., 11.) Professor Bradford.
10. Continuation of 9. (Course in Architecture, second year, second term, M., W., F., 11.) Professor Bradford.
11. Continuation of 10. (Course in Architecture, second year, third term, M., W., F., 11.) Professor Bradford.
12. **Architectural Drawing.** Drawing architectural ornament, details of orders and styles, with the special object of impressing upon the student's mind the architectural characteristics considered in Course 9. Two hours credit. (Course in Architecture, second year, first term, W., Th., 2-4.) Professor Bradford.
13. Continuation of 12. (Course in Architecture, second year, second term, W., Th., 2-4.) Professor Bradford.
14. Continuation of 13. (Course in Architecture, second year, third term, W., Th., 2-4.) Professor Bradford.

15. **Designing.** Lectures and practice in designing structures adapted to modern requirements. Four hours credit. (Course in Architecture, third year, first term, W., Th., 1-4. F., 1-3.) Professors Bradford and French.
16. **Designing.** Lectures and practice. Two hours credit. (Course in Architecture, third year, second term, Th., F., 1-3.) Professors Bradford and French.
17. **Designing.** Lectures and practice. Four hours credit. (Course in Architecture, third year, third term, W., Th., 1-4. F., 1-3.) Professors Bradford and French.
18. **Designing.** Four hours credit. (Course in Architecture, fourth year, first term, Th., 10. W., Th., 1-4.) Professor Bradford.
19. **Designing.** Four hours credit. (Course in Architecture, fourth year, third term, Th., 11. Th., F., 1-4.) Professor Bradford.
20. **Thesis.** Original design to be accompanied with written description, specifications and estimate. Five hours credit. (Course in Architecture, fourth year, third term.) Professors Bradford and French.
21. **Architecture of Tall Skeleton-Constructed Buildings.** Two hours credit. (Course in Architecture, fourth year, second term, F., 10, 1-3.) Professor Bradford.

DRAWING

Office, Hayes Hall, Room 23 or 27

PROFESSOR BRADFORD, ASSOCIATE PROFESSOR FRENCH, MR. LEWIS, MR. MARTIN, MR.
VOSSKUEHLER, MR. TIDBALL. . . .

2. **Lettering.** Practice and occasional lectures. Three hours credit. (Short Course in Industrial Arts, first year; Short Course in Mining, second year, first term, Th., F., 1-4. Must be accompanied or preceded by 24 or 27.) Associate Professor French and Mr. Vosskuehler.
5. **Technical Drawing.** Rules and Methods for making working drawings in machine design to represent correctly form and dimensions for shop use, and for tracing and blue-printing the same. This course must be preceded by Course 35. Three hours credit. (Courses in Electrical and Mechanical Engineering, Industrial Arts and Manual Training, third year, first term, Th., F., 1-4.) Associate Professor French.
7. **Photography.** Lectures: Optics of photography, chemistry of photography, exposing and developing, printing, lantern slides, orthochromatic photography and some of the applications of photography. Practice: Outdoor, interior, instantaneous and flash-light photography, copying, lantern slides and printing. Two hours credit. (Course in Architecture, third year, first term, M., Tu., 1-3; Courses in Civil and Mechanical Engineering, third year; Courses in Ceramics and Mining Engineering, fourth year, third term, M., Tu., 1-3; or Th., F., 1-3.) Professor Bradford and Mr. Lewis.
10. **Mechanical Drawing.** Second term. Lectures and practice. Elementary mechanical drawings, lettering and working drawings. Three hours credit. Th., F., 1 to 4. Associate Professor French.
11. **Mechanical Drawing.** Lectures and practice. Five hours credit. (Course in Clay-working, second year, third term, W., 9. Th., F., 1-5.) Mr. Vosskuehler.
14. **Pen Drawing.** Must be preceded by Course 28. Two hours credit. (Course in Architecture, second year, first term, M., Tu., 2-4.) Mr. Lewis.
15. **Technical Drawing.** Second and third terms. Lectures and practice. House-planning. This course preceded by Course 20. One and one-half hours credit. M., 1 to 4. Associate Professor French.

16. **Technical Drawing.** Third term. Lectures and practice. Designing, preparing working drawings and specifications for structures related to agriculture. This course preceded by Course 10. Three hours credit. M., Tu., 1 to 4. Associate Professor French.
17. **Practice and Occasional Lectures.** First term. Lectures on color standards, color theory, color harmony, color appearances, tone and gradation, atmosphere and values. Practice in color work, either water or oil color. Mr. Martin.
18. **Water Color Painting.** Must be preceded by Course 28. Three hours credit. (Course in Architecture, fourth year, second term, Tu., Th., 8-11.) Mr. Martin.
19. **Water Color Painting.** Must be preceded by Course 18. Two hours credit. (Course in Architecture, fourth year, third term, Tu., Th., 8-10.) Mr. Martin.
20. **Mechanical Drawing.** First term. Lectures and practice. Elementary mechanical drawing and lettering. One and one-half hours credit. M., 1 to 4. Associate Professor French.
21. **Technical Drawing.** Must be preceded by Course 34. Two hours credit. (Course in Chemical Engineering, third year, first term, Tu., Th., 8-10.) Associate Professor French and Mr. Vosskuehler.
22. **Technical Drawing.** Must be preceded by Course 21. Two hours credit. (Course in Chemical Engineering, third year, second term, W., Th., 1-3.) Associate Professor French and Mr. Vosskuehler.
23. **Technical Drawing.** Must be preceded by Course 22. Two hours credit. (Course in Chemical Engineering, third year, third term, M., Tu., 1-3.) Associate Professor French and Mr. Vosskuehler.
24. **Free Hand Drawing.** Pencil drawing from models and plaster casts. Practice and occasional lectures. One hour credit. (Short course in Industrial Arts, first year, first term, W., 1-3, or S., 8-10.) Messrs. Lewis and Tidball.
25. **Free Hand Drawing.** Charcoal from models and plaster casts. Practice and occasional lectures. Must be preceded by Course 24. One hour credit. (Short Course in Industrial Arts, first year, second term, W., 1-3, or S., 8-10.) Messrs. Lewis and Tidball.
26. **Free Hand Drawing.** Charcoal from plaster casts and still life. Practice and occasional lectures. Must be preceded by 25. One hour credit. (Short Course in Industrial Arts, first year, third term, W. 1-3.) Messrs. Lewis and Tidball.
27. **Free Hand Drawing.** Pencil drawing from models and plaster casts. Practice and occasional lectures. Two hours credit. (All Four-Year Courses, first year, first term, M., W., 8-10; M., Tu., 10-12; M., Tu., 1-3; M., F., 1-3; Th., F., 10-12; Th., F., 1-3; W., F., 8-10; W., 1-3; S., 8-10; or Tu., Th., 1-3. Course in Clay-working, second year, second term, Th., F., 1-3.) Mr. Tidball.
28. **Free Hand Drawing.** Charcoal drawing from plaster casts and still life. Practice and occasional lectures. Must be preceded by Course 27. Two hours credit. (All Four-Year Courses, first year, second term, schedule as in Course 27.) Messrs. Lewis, Martin and Tidball.
32. **Lettering.** Practice and occasional lectures. This course must be preceded or accompanied by Course 27. Three hours credit. (All Four-Year Courses, first year, third term, W., F., S., 8-10; W., F., 8-10; S., 10-12; M., 8-10; S., 8-12; M., W., 8-10; S., 10-12; M., Tu., 1-4; or W., F., 1-4.) Messrs. Lewis, Martin and Tidball.

33. **Projection Drawing.** Lectures and practice. Orthographic, isometric and oblique projections, and elementary working drawings. This course must be preceded by Course 32. Three hours credit. (Second year, first term.)

Lectures.	Practice.	Course in
M. 8	Tu. Th. 9-11	Architecture.
W. 11	M. F. 10-12	Ceramics.
W. 11	M. F. 10-12	Chemical Engineering.
M. 8	Tu. Th. 9-11	Civil Engineering.
Th. 11	M. F. 10-12	Electrical Engineering.
W. 11	M. F. 10-12	Industrial Arts.
W. 11	M. F. 10-12	Manual Training.
W. 11	M. F. 10-12	Mechanical Engineering.
Tu. 11	Tu. Th. 9-11	Mining Engineering.

Associate Professor French and Mr. Vosskuehler.

34. **Descriptive Geometry.** Lectures and practice. This course must be preceded by 33. Three hours credit. (Second year, second term.)

Lectures.	Practice.	Course in
M. W. 11	F. 10-12	Ceramics.
Tu. Th. 11	F. 10-12	Chemical Engineering.
Tu. Th. 11	F. 10-12	Electrical Engineering.
M. W. 11	F. 10-12	Industrial Arts.
Tu. Th. 11	F. 10-12	Manual Training.
M. W. 11	F. 10-12	Mechanical Engineering.
Tu. Th. 11	Tu. 9-11; or F. 10-12	Mining Engineering.
M. W. 8	Th. 9-11	Short Industrial Arts.

Associate Professor French and Mr. Vosskuehler.

35. **Shades, Shadows and Perspective.** Three hours credit. (Second year, third term.)

Lectures.	Practice.	Course in
W. 11	M. F. 10-12	Ceramics.
Tu. 8	Tu. Th. 9-11	Civil Engineering.
Th. 11	M. F. 10-12	Electrical Engineering.
W. 11	M. F. 10-12	Industrial Arts.
W. 11	M. F. 10-12	Manual Training.
W. 11	M. F. 10-12	Mechanical Engineering.
Tu. 11	Tu. Th. 9-11	Mining Engineering.
M. 8	Tu. Th. 9-11	Short Industrial Arts.

Associate Professor French and Mr. Vosskuehler.

36. **Descriptive Geometry.** Five hours credit. (Courses in Architecture and Civil Engineering, second year, second term, M. W. 8. Tu. Th. 8.11.) Associate Professor French.

37. **Architectural Perspective and Shades and Shadows.** Lectures and practice. This course must be preceded by Course 36. Five hours credit. (Course in Architecture, second year, third term, M. W. 8. Tu. Th. 8-11. Associate Professor French.

38. **Projection Drawing.** Lectures and practice. Orthographic, isometric and oblique projections and intersections. This course must be preceded by Course 2. Three hours credit. (Short Course in Industrial Arts, first year; Short Course in Mining, second year, second term, Th. F. 1-4.) Mr. Vosskuehler.

39. **Draughting and Blue-Printing.** Practice and occasional lectures. This course must be preceded by Course 38. Three hours credit. (Short Course in Industrial Arts, first year; Short Course in Mining, second year; third term, Th. F. 1-4.) Mr. Vosskuehler.

40. **Clay Modeling.** Modeling in clay, ornamental forms from plaster casts, photographs, and nature. This course must be preceded by Course 28.

Two hours credit. (Course in Architecture, third year, second term, M. Tu. 1-3.) Mr. Lewis.

41. **Clay Modeling.** Continuation of Course 40. Modeling in clay and wax from photographs, nature and original designs. Casts made in plaster and gelatine moulds. This course must be preceded by Course 40. (Course in Architecture, third year, third term, M. Tu. 1-3.) Mr. Lewis.

ASTRONOMY

The Emerson McMillin Observatory.

PROFESSOR H. C. LORD, MR. SMITH, MR. MAAG.

1. **General Astronomy.** Lectures and recitations on the general principles of Astronomy. Non-mathematical. Text-book, Young's Manual of Astronomy. Two hours credit, three terms. Tu., Th., at 1. Professor Lord.
2. **Astronomy, Geodesy and Least Squares.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Three hours credit, three terms. M., W., F., at 11. Professor Lord and Mr. Maag.
3. **Meteorology.** Lectures on practical meteorology, supplemented by laboratory work in map and chart making and regular observations with the instruments in use by the Weather Bureau. Text-book, Waldo, with daily weather maps issued by the Bureau. Two hours credit, third term. Tu., Th., at 4. Mr. J. Warren Smith.
7. **Advanced Astronomy.** Lectures, reading and laboratory work from 3 to 5 hours a week, three terms. Courses will be offered in Theoretical Astronomy or Astrophysics, as students may elect. Students must have had calculus. Hours to be arranged. Professor Lord.
4. **Astronomy, Geodesy and Least Squares.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Three hours credit. (Course in Civil Engineering. Third year. First term. Lecture M., W., F., 11. Laboratory hours to be arranged with the students.) Laboratory work entirely. Four hours credit. (Course in Civil Engineering, third year, third term.)
5. Continuation of 4. Three hours credit. Second term, M., W., F., 11.
6. Continuation of 5. Four hours credit. Third term. Laboratory work entirely.

BACTERIOLOGY

ASSOCIATE PROFESSOR MORREY.

1. **Bacteriology.** The work will consist of lectures on the general principles of bacteriology. The laboratory work will include the preparation of various culture media, general and special (sputum) staining methods, with particular attention to water examination for suspected contamination. First and second terms. Two hours credit. Associate Professor Morrey. For time schedule consult the professor in charge. Required in Courses in Pharmacy.
2. **Bacteriology.. Second term.** Lectures and laboratory work on the general facts concerning bacteria and their relation to life processes followed by lectures on their special application to cooking and other domestic industries. Two hours credit. M., 9 and Tu., 9 to 11. Dairy Course. Associate Professor Morrey.

3. **Bacteriology.** Third term. Lectures and laboratory work on the general facts concerning bacteria and their relation to life processes followed by lectures on their special application to cooking, and other domestic affairs. Two hours credit. Tu., Th., 9. Domestic Science. Associate Professor Morrey.
4. **Bacteriology.** Third term. Three hours credit. General principles of bacteriology and laboratory practice in preparing culture media, cultures, stains and staining. Veterinary medicine.
5. **General.** Three terms. First term, Morphology, preparation of media, culture and staining methods; second and third terms, special bacteriology along one of the following lines: (a) pathogenic bacteria; (b) agricultural; (c) dairy; (d) sanitary bacteriology and water examination; (e) bacterial chemistry, products of bacterial action, enzymes, ptomaines, toxins, etc. Four hours credit. Recitations, Tu., 11; laboratory, W., Th., 1 to 4. Associate Professor Morrey. Elective in Colleges of Arts and Agriculture.
6. **Advanced Bacteriology.** More advanced work on lines of Course 5. Five hours credit. Associate Professor Morrey.
Courses 5 and 6 are open to graduate students. Elective in College of Arts.

BOTANY

Botanical Hall.

PROFESSOR KELLERMAN, ASSOCIATE PROFESSOR SCHAFFNER, MR. JENNINGS, MISS BURR, FLORIST MCOWAN.

1. **Elementary Botany..** Third Term. Text-book, Kellerman's Elementary Botany and Spring Flora. Instead of the Spring Flora, the students may use Britton's Manual. This is a general course introductory to those that follow. It comprises mostly Organography and Vegetable Physiology and a study of the native flora, but some instruction is also given in Ecology and Classification. For the practical or laboratory work, Kellerman's Practical Exercises is used as a guide. The students are required to do some work in the field in both observation and collecting. Five hours credit. M., Tu., Th., F., 9.
3. **Systematic and Physiological Botany.** Lectures and recitations; Kraemer's Botany and Pharmacognosy is used. Four hours credit. First term. This course is planned for students preparing for a course in medicine or in pharmacy; it deals somewhat fully with Ecology and Physiology, also Morphology and Classification. The students are required to add to their herbariums begun in the Spring term and thus obtain a full set of the native medicinal plants. M., Tu., F., at 10. Laboratory, Th., 1 to 3. Professor Kellerman and Associate Professor Schaffner.
4. **Medical Botany.** Two hours credit. Second term. This course is devoted exclusively to laboratory study of the medicinal plants and vegetable products used in medicine. Kraemer's Botany and Pharmacognosy is mainly followed. Tu., Th., 2 to 4. Associate Professor Schaffner.
6. **Physiological Botany.** Lectures and recitations. Laboratory and field work. Three hours credit. First term. Text-book, Coulter's Plant Studies, M., W., F., at 8. Laboratory, Sec. 1, Monday, 1 to 4. Sec. 2, Wed., 1 to 4. Professor Kellerman and Associate Professor Schaffner.
7. **Economic Botany.** Lectures, recitations and laboratory. Second term. Text-book, Coulter's Plant Studies. This course is, in part, a continuation of course 9 but the major portion of the term is devoted to a botanical study of economic plants and the vegetable products of commerce. M., W., F., at 8. Laboratory, Sec. 1, Monday, 1 to 4. Sec. 2, Wed., 1 to 4. Professor Kellerman and Associate Professor Schaffner.

8. **Vegetable Pathology.** Lectures, recitations. Laboratory and field work. Third term. The diseases of plants due to inorganic causes are briefly studied, but the main part of the course is devoted to a study of the parasitic fungi most destructive to cultivated plants. The means of their prevention forms the last part of the course. The laboratory and field work deals mainly with the commonest and most injurious parasitic fungi. Each student takes up the latter part of the term some economic subject or group of parasites for special study. M., W., F., at 8. Laboratory, Sec. 1, Tuesday, 1 to 4; Sec. 2, Thursday, 1 to 4. Professor Kellerman and Associate Professor Schaffner.
9. **Dendrology.** Lectures and field work. Two hours credit. First term. Kellerman's Forest Trees of Ohio and various reference books are used. The native trees are studied and illustrative collections made. Tu., Th., 10 to 12. Professor Kellerman.
10. **Dendrology.** Laboratory work and special investigations on the structure and diseases of timber. Two hours credit. Second term. Laboratory open daily 8 to 12. Professor Kellerman.
11. **Laboratory Work.** Special investigations in Economic Botany and Vegetable Pathology. First, second and third terms. Two to five hours credit. Laboratory open daily 8 to 12. Professor Kellerman and Associate Professor Schaffner.
13. **Household Botany.** Spring term. Lectures and Seminary work Tuesday and Thursday at 8; Laboratory Tu., Th., at 8 and M., and W., 8 to 10. Four hours credit. This course is planned exclusively for students in Domestic Economy, and is devoted to those phases which directly concern household work and home life. It includes a study of such economic species as culinary, medicinal, starch, oil and fibre-producing plants. Special attention is given to yeast, fermentations, enzymes, bacteria, antiseptics, fungicides, food-destroying fungi, and edible and poisonous mushrooms.
16. **Laboratory Work.** In this course the student undertakes special investigations on medicinal plants, poisonous plants, adulterations, etc. Two to five hours credit. Laboratory open daily 8 to 12. Professor Kellerman and Associate Professor Schaffner.
17. **Forest Botany.** Lectures and Seminary work Monday and Friday at 10; laboratory and field work Tuesday and Thursday, 2 to 4. Four hours credit. This course is open to students who have completed Botany 6, 7 and 8 or 21, 22 and 23. It includes a special study of native and introduced trees and the preparation of a dendrological herbarium.
18. **Normal and Pathological Histology of Wood.** Seminary F., at 10; Laboratory work M., Tu., Th., 2 to 4. Four hours credit. This is a continuation of course 17 and includes a study of the development of wood, characters of coniferous, hard and soft woods and changes due to attacks of fungi. The students are required to prepare a series of gross and microscopic sections.
19. **Forest Ecology and Pathology.** Lectures and Seminary work Monday and Friday at 10; laboratory and field work Tuesday and Thursday, 2 to 4. Four hours credit. This is a continuation of course 18, and includes a study of the stem, leaf and root system in relation to the environment; of seed distribution and seedlings; and characteristics and distribution with reference to geological and physiographic, as well as other ecologic conditions. Students are required to prepare a pathological herbarium.
21. **Ecology.** Lectures, recitations, laboratory. First term. Coulter's Plant Relations is used the first term and his Plant Structures and department reference books the remainder of the year. Besides the general work in laboratory, lecture room and field, each student is assigned a special subject in Ecology; occasional reports on current botanical

literatures are also required. Tu., Th., at 9. Laboratory Tu., 2 to 4. Professor Kellerman and Associate Professor Schaffner.

22. **Morphology and Physiology.** Continuation of Course 21. Three hours credit. Second term.
23. **Systematic Botany.** Continuation of Course 22. Three hours credit. Third term.
24. **Laboratory and Field Work.** Two or three hours credit. Three terms. Daily 8 to 12. Professor Kellerman and Associate Professor Schaffner.
25. **Laboratory Work in Histology and Physiology.** Three to five hours credit. Three terms. Prerequisite courses 6, 7, 8, or 21, 22, 23. Laboratory open daily. Associate Professor Schaffner.
26. **Advanced Laboratory Work in Histology and Microtechnique.** Five hours credit. Three terms. Prerequisite courses 6, 7, 8 or 21, 22, 23. Laboratory open daily. Associate Professor Schaffner.
27. **Laboratory and Field Work in Systematic Botany.** Three to five hours credit. Three terms. Prerequisite courses 6, 7, 8, or 21, 22, 23. Laboratory open daily. Professor Kellerman.
32. **Minor Investigations.** Field and laboratory work. One to three hours credit. Three terms. Prerequisite course 7. Daily. Professor Kellerman and Associate Professor Schaffner.
33. **Current Literature.** Prescribed critical reading and indexing. One to three hours credit. Three terms. Prerequisite course 7. Daily. Professor Kellerman.

GRADUATE WORK

28. **Research Work in Systematic Botany.** Five hours credit. Three terms. Prerequisite courses 6, 7, 8, or 21, 22, 23. Laboratory open daily. Professor Kellerman.
29. **Research Work in Morphology and Physiology.** Five or ten hours credit. Three terms. Prerequisite course 26. Laboratory open daily. Associate Professor Schaffner.
30. **Monographic Work.** Five or ten hours credit. Three terms. Prerequisite course 27. Laboratory open daily. Professor Kellerman.
31. **Research Work in Ecology.** Five or ten hours credit. Three terms. Prerequisite courses 6, 7, 8, or 21, 22, 23. Laboratory open daily. Associate Professor Schaffner.

CERAMICS

Office, Orton Hall, Room 4

PROFESSOR ORTON, JR., MR. BLEININGER, MR. PURDY.

1. **Ceramic Chemistry.** This course is open only to those who have completed General Chemistry 12. The student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy minerals. Five hours credit. (Course in Ceramics and Short Course in Clay-working, second year, first term, M., Tu., W., 1-4.) Mr. Bleininger.
2. **Continuation of Course 1.** The student begins the quantitative analysis of clays and complex minerals, working first on samples of known composition, and later on unknown materials. Five hours credit. (Course in Ceramics and Short Course in Clay-working, second year, second term, M., Tu., W., 1-4.) Mr. Bleininger.

3. Continuation of Course 2. The student completes the ultimate analysis of clays and begins the proximate or "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five hours credit. (Course in Ceramics and Short Course in Clay-working, second year, third term, M., Tu., W., 1-4.) Mr. Bleininger.
4. **Lectures on Clay Manufacture** (supplemented by frequent recitations). The origin, composition and properties of clays and other minerals employed in the clay, glass and cement industries. Five hours credit. (Course in Ceramics, third year, first term; Short Course in Clay-working, second year, first term, M., Tu., W., Th., F., 8.) Professor Orton.
5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of clay wares, including the selection and winning of the materials, their preparation and manufacture. Five hours credit. (Course in Ceramics, third year; Short Course in Clay-working, second year, second term, M., Tu., W., Th., F., 8.) Professor Orton.
6. Continuation of Course 5. A series of lectures, with recitations, on the drying burning and decoration of clay wares, including the preparation of coloring material, glazes, etc. Five hours credit. (Course in Ceramics, third year; Short Course in Clay-working, second year, third term, M., Tu., W., Th., F., 8.) Professor Orton.
7. **Ceramic Chemistry.** Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five hours credit. (Course in Ceramics, third year, second term, M., Tu., W., 1-4.) Mr. Bleininger.
9. **Laboratory Work in Ceramics.** Open only to those who have completed Courses 3 and 6. The student will first practice the various methods of measurement of the physical properties of clays, and then will undertake the production of such wares as are made from single clays; then wares made by blending two or more natural clays; and, then, such wares as are made from an artificial body. In each case the bodies made will be burnt and tested. Five hours credit. (Course in Ceramics, fourth year, first term, W., Th., F., 1-4.) Professor Orton and Mr. Purdy.
10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes" and taking successively the soft raw-lead glazes, the fritted lead-boracic-acid glazes, and the hard-fire leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit." Five hours credit. (Course in Ceramics, fourth year, second term, W., Th., F., 1-4.) Professor Orton and Mr. Purdy.
11. Continuation of Course 10. The student will practice on the use of the coloring and opacifying oxides in glazes, and on the production of colors for the decoration of pottery, and of body stains. Five hours credit. (Course in Ceramics, fourth year, third term, M., F., 8-12. F., 1.3.) Professor Orton and Mr. Purdy.
12. **Lectures on Cement Manufacture.** The theory of hydraulicity, the compounding, manufacture and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Five hours credit. (Course in Ceramics, fourth year, second term, M., Tu., W., Th., F., 9.) Mr. Bleininger.
15. **Thesis.** See requirements for graduation, page 117.

16. **General Principles of Applied Ceramics.** A series of lectures on the chemical technology of the clay, glass and cement industries. Five hours credit. (Course in Chemical Engineering, fourth year, third term, M., Tu., W., Th., F., 11.) Professor Orton.
17. **Practice in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns and burning cylinders.** Students will be allowed to specialize along the lines they intend to follow. Four hours credit. (Course in Ceramics, fourth year, second term, M., Tu., 1-5.) Professor Orton.
18. **Laboratory Work on Cement Manufacture.** Training is given in the analysis of cement materials by the methods in technical use; in the preparation of minerals for cement; in the burning of cement; in the testing of the products, and in the investigation of the general problem of the cement manufacturer. Open to students who have had Ceramics (12). Five hours credit. (Alternative with Ceramics (11), Course in Ceramics, fourth year, third term, M., F., 8-12. F., 1-3.) Mr. Bleining.

CHEMISTRY

Office, Chemical Hall

*PROFESSOR MCPHERSON, EMERITUS PROFESSOR NORTON, ASSOCIATE PROFESSOR HENDERSON, ASSOCIATE PROFESSOR FOULK, MR. MUMMA, MR. WEBB,
MISS ANDREWS, MR. COOVER.

1. **Elementary Chemistry.** Arranged for students who have little or no knowledge of chemistry. Three sub-divisions; one lecture, one quiz, and three hours laboratory practice weekly throughout the year. In the laboratory the student performs an extended series of experiments illustrating the principles of chemistry. Three hours credit. First, second and third terms. Lecture, Th., at 1. Quiz, Tu., at 1. Laboratory, M., 1-4, or Sat., 9-12. Associate Professor Henderson, Mr. Mumma, Mr. Webb and the Department Fellows.
3. **Elementary Chemistry.** One hour lecture, one hour quiz and six hours laboratory work weekly. Five hours credit. This course is arranged for students in the Short Courses in Ceramics, Mining and Pharmacy. First term, lect. M., 8; quiz Th. 10; lab. Tu. W. 1-4. Second term, lect. M. 3; quiz Th. 10; lab. Tu. W. 1-4. Associate Professor Henderson, Mr. Mumma, Mr. Webb, Miss Andrews.
7. **Elementary Chemistry.** Inorganic. Lectures, laboratory and quiz. Laboratory work; first term, experiments upon the non-metals; second term, experiments upon the metals. Five hours credit. This course is arranged for students in the College of Engineering. Lect. M., 8 or 3. Quiz, F., 9, 10, 1 or 3. Laboratory M., Tu., 9-12; Th., F., 9-12; Th., F., 1-4; or W., 8-10, S., 8-12. Professor McPherson, Mr. Mumma, Mr. Webb, Miss Andrews.
12. **Qualitative Analysis.** Four hours credit. This course follows course 7 and is designed for students in Engineering Courses. For hours see Course 7, omitting lecture.
- 12a. **Qualitative Analysis.** Five hours credit. (Course in Clay-working, first year, third term, F., 9; W., 8-10; F., 1-4; S., 8-11.) Associate Professor Henderson, Mr. Mumma, Mr. Webb, Miss Andrews.
2. **Qualitative Analysis.** Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to the analysis of unknown substances. This course must be preceded by course 1 or 7 and accompanied by course 21 unless special permission is obtained from the instructor in charge. Three to five hours credit. First and second

terms. Students electing this course will take course 17 in the third term. Afternoons. Associate Professor Foulk.

17. **Inorganic Preparations.** Laboratory and recitations. This course includes the preparation of chemically pure inorganic substances from the crude materials. Three to five hours credit. Third term. Afternoons. Associate Professor Henderson.
11. **Toxicology.** Lectures and recitations. This course treats of poisons—their effects, antidotes and detection. Third term. Four hours credit. Professor Norton. M., Tu., Th., F., 10-11.
20. **Quantitative Analysis.** Laboratory, lectures and recitations. This course is designed to give the student a knowledge of the first principles of gravimetric and volumetric analysis. It must be preceded by courses 1 and 2 or 7 and 12 and must be accompanied by course 31. Three to five hours credit. First, second and third terms. Lecture, M., at 1. Laboratory, afternoons. Associate Professor Foulk.
31. **Stoichiometry.** Recitations. Drill in solution of chemical problems. Two hours credit. First term. Tu. and Th., 11-12. Associate Professor Foulk.
21. **Advanced General Chemistry.** Lectures and recitations. This course consists of a rapid review of the fundamental physical and chemical laws relating to chemistry, followed by a thorough study of the principles of general inorganic chemistry. It should accompany course 2. Two hours credit. First, second and third terms. Tu. and Th., 9-10. Associate Professor Henderson.
33. **Analytical Chemistry.** Laboratory, lectures and recitations. The laboratory work is in the main a continuation of course 20, which must precede it. Lectures and recitations include a general review of qualitative and quantitative methods and the theory of analytical operations and reactions. Four or five hours credit. First, second and third terms. Hours to be arranged with the instructor. Associate Professor Foulk.
34. **Organic Chemistry.** Two recitations and six hours laboratory weekly. The laboratory work includes the preparation of some of the important compounds used in medicine. First and second terms. Five hours credit each term. Recitation, Tu. and Th., 10-11. Laboratory, first term, M. and Tu., 1-4. Second term, Th. and F., 1-4. Short course in Pharmacy. Professor McPherson.
8. **Organic Chemistry.** Two recitations and six hours laboratory work weekly. The laboratory work includes the preparation of typical organic compounds. The course must be preceded by courses 20 and 21 unless special permission is obtained from the instructor in charge. Five hours credit. First term. Recitations Tu. and Th., 10-11. The laboratory is open afternoons. Professor McPherson.
9. **Organic Chemistry.** Continuation of course 8. Recitations, Tu. and Th., 10-11. The laboratory is open afternoons. Second and third terms. Professor McPherson.
32. **Industrial Chemistry.** Laboratory and lectures. This course must be preceded by at least the equivalent of course 20. Four hours credit. First and second terms. Tu., Th., at 10; W., F., 1 to 3. Professor Norton.
15. **Sanitary Analysis.** Lectures and Laboratory. A study of the most important chemical methods for the analysis of water and air. This course must be preceded by course 20. Four hours credit. Third term. Tu., Th., at 10; F., 1 to 4. Associate Professor Foulk.
27. **Advanced Chemistry.** Laboratory and reference work. Three to five hours credit. First, second and third terms. Hours to be arranged with the instructor.

- (a) Organic. Arranged for students who have completed courses 8 and 9. The work includes the further preparation of typical organic compounds, their purification and analysis. Professor McPherson.
 - (b) Inorganic. This course is especially designed for students who have completed course 17, and are desirous of studying the methods of preparation and the properties of a series of inorganic substances; or for those who have completed course 21 and desire to continue the study of certain chapters of inorganic chemistry. Associate Professor Henderson.
 - (c) Analytical. Special topics such as the critical study of methods, etc. Associate Professor Foulk.
28. **Organic Chemistry.** Lectures on special topics. This course must be preceded by courses 8 and 9 and preferably by course 27 (a). Two hours credit. Third term. Hours to be arranged with the instructor. Professor McPherson.
35. **Rare Elements.** Lectures and recitations. This course is designed to serve two purposes. It extends the student's knowledge of chemical facts and principles by a study of those elements usually passed by with brief comment in general courses. It is of considerable practical value to students of metallurgy, since many of the rarer metals are now frequently met with in the metallurgical industries, and the analyst must be familiar with their properties. Three hours credit. First term. M., W., F., 8-9. Associate Professor Henderson.
30. **Physical Chemistry.**
- (a) Lectures and recitations. This course aims to give the student such a general knowledge of physical chemistry as may be obtained by a thorough study of some one of the standard texts on the subject. The course must be preceded by courses 20 and 21, and may be taken independently of course 30 (b). Three hours credit. Second and third terms. M., W., F., at 8. Associate Professor Henderson.
 - (b) Laboratory. A course in experimental work designed to illustrate the leading principles of the science. The course must be accompanied or preceded by course 30 (a). Three hours credit. Second and third terms. Afternoons. Associate Professor Henderson.
25. **Historical Chemistry.** Lectures and recitations. Three hours credit. Second term. This course must be preceded by course 21. Hours to be arranged with the instructor. Professor Norton.
26. **Chemical Seminary.** Advanced students meet for the discussion of special topics and current literature. One hour credit. First, second and third terms. Monday evenings.
29. **Research Work, Library and Laboratory Work.** Five to ten hours credit. First, second and third terms. Hours arranged with the instructor. Professor McPherson, Associate Professor Henderson, Associate Professor Foulk.
36. **The Teaching of Chemistry.** This course is arranged for students who expect to teach chemistry in secondary schools. It includes a general discussion of the equipment of laboratories, methods of teaching and related topics. Each student will spend two hours in conference and three hours in supervising the laboratory work of the freshmen students. The course is open only to advanced students and no student is allowed to take it except by permission of the instructor in charge. Three hours credit. Third term: Conferences Tu. and Th., 9-10. Professor McPherson.

CIVIL ENGINEERING

Office, Hayes Hall, Room 13

PROFESSOR SHERMAN, PROFESSOR HELLER, ASSOCIATE PROFESSOR ENO, MR. BRUNING,
MR. DAVIES.

1. **Land Surveying.** Recitations and field work. Johnson's Theory and Practice of Surveying. Six hours credit. (Course in Civil Engineering, second year, first term, M. Tu. W. Th. F. 1, M. 2-4; or M. Tu. W. Th. F. 11, Tu. 2-4; or M. Tu. W. Th. F. 1; W. 2-4.) Professor Sherman, Associate Professor Eno, Mr. Bruning, Mr. Davies.
2. **Railroad Surveying.** Recitations and field work. Searle's Field Engineering and Crandall's Transition Curve. Six hours credit. (Course in Civil Engineering, second year, third term, M. Tu. W. Th. F. 1, M. 2-4; or M. Tu. W. Th. F. 11, Tu. 2-4; or M. Tu. W. Th. F. 1, W. 2-4.) Professor Sherman, Associate Professor Eno, Mr. Bruning, Mr. Davies.
3. **Topographical Surveying.** Lectures, field work and drawing. Johnson's Surveying used for reference. Four hours credit. (Course in Civil Engineering, third year, first term, M. Th. 10, S. 8-12; or Tu. F. 10, S. 8-12.) Professor Sherman, Mr. Bruning.
4. **Topographical Drawing.** Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four hours credit. (Course in Civil Engineering, second year, second term, M. Tu. 1-4, W. 1-3; or Th. F. 2-4, S. 8-12.) Associate Professor Eno, Mr. Bruning.
6. **Stereotomy.** Recitations, drawing and model cutting. Warren's Stereotomy. Four hours credit. (Courses in Architecture and Civil Engineering, third year, second term, M. Th. 10, S. 8-12; or Tu. F. 10, S. 8-12.) Professor Sherman, Associate Professor Eno, Mr. Bruning.
7. **Bridge Stresses.** Recitations and lectures. Part 1 of Dubois' Stresses in Framed Structures. Five hours credit. (Course in Civil Engineering, third year, third term, M. Tu. W. Th. F. 8 or 9.) Professor Heller.
8. **Bridge Designing.** Lectures and drawings. Part II of Dubois' Stresses in Framed Structures and Johnson's Modern Framed Structures used for reference. Five hours credit. (Course in Civil Engineering, fourth year, first term, M. Tu. W. Th. F. 8.) Professor Heller.
10. **Sanitary Engineering.** Recitations and lectures. Folwell's Sewerage. Five hours credit. (Course in Civil Engineering, fourth year, third term, M. Tu. W. Th. F. 11.) Associate Professor Eno.
14. **Civil Engineering Laboratory.** Cement testing. Two hours credit. (Course in Civil Engineering, fourth year, second term, M. 1-5; or Tu. 1-5.) Professor Sherman, Associate Professor Eno.
15. **Masonry Construction.** Recitations and lectures. Baker's Masonry Construction. Five hours credit. (Courses in Architecture and Civil Engineering, fourth year, first term, M. Tu. W. Th. F. 9.) Professor Sherman.
16. **Highways.** Recitations and lectures. Byrne's Highway Construction. Five hours credit. (Course in Civil Engineering, third year, first term, M. Tu. W. Th. F. 8 or 9.) Associate Professor Eno.
17. **Railway Location.** Recitations and lectures. Wellington's Economic Theory of Railway Location. Five hours credit. (Course in Civil Engineering, fourth year, second term, M. Tu. W. Th. F. 9.) Professor Sherman.
18. **Water Supply.** Recitations and lectures. Folwell's Water-Supply Engineering. Five hours credit. (Course in Civil Engineering, fourth year, third term, M. Tu. W. Th. F. 8.) Associate Professor Eno.

19. **Trusses.** Lectures and drawings. Five hours credit. (Courses in Architecture, Mining and Mechanical Engineering, third year, third term, M. Tu. Th. F. 10, W. 2; or M. Tu. W. Th. F. 11.) Professor Heller.
21. **Surveying.** Recitations and field work. Bruce and Ketchum's Manual. Three hours credit. (Courses in Architecture and Industrial Arts, fourth year, third term, M. W. F. 9.) Professor Sherman, Mr. Bruning, Mr. Davies.
22. **Summer Course in Field Work.** The students are taken into camp in a rough, broken country and given a thorough drill in land and elementary railroad surveying. The course begins the Friday before Commencement Day, and continues four weeks of six days per week, ten hours per day. The work of the student and the discipline of the camp is in the hands of competent instructors. This course must be preceded by Courses 1, 2 and 4. Students conditioned on any of these courses may be admitted at discretion of instructor in charge. (At conclusion of second year of Course in Civil Engineering.) Professor Sherman, Associate Professor Eno, Mr. Bruning, Mr. Davies.
23. **Summer Course in Field Work.** Similar to Course 22. Students work on advanced railroad surveying and topographical surveying. This course must be preceded by Courses 3, 22 and 24. Students conditioned in any of these courses may be admitted at discretion of instructor. (At conclusion of third year of Course in Civil Engineering.) Professor Sherman, Associate Professor Eno, Mr. Bruning, Mr. Davies.
24. **Drawing of Engineering Structures.** Five hours credit. (Course in Civil Engineering, third year, second term, M. Tu. 1-5, W. 1-3; or W. 3-5, Th. F. 1-5.) Professor Sherman, Mr. Bruning, Mr. Davies.
25. **Advanced Bridge Work.** Draw-spans, continuous girders, steel arches, etc. Five hours credit. (Option, Course in Civil Engineering, fourth year, second term, M. Tu. W. Th. F. 8.) Professor Heller.
26. **Steel Construction.** Steel skeleton construction for tall buildings. Three hours credit. (Course in Architecture, fourth year, second term, M. W. F. 9.) Professor Heller.

CLAY-WORKING

(See Ceramics)

DOMESTIC ECONOMY

Hayes Hall, Rooms 1, 3 and 10.

PROFESSOR STONER, ASSOCIATE PROFESSOR SOUTHER.

DOMESTIC SCIENCE

1. **Food Economics.** First term. Lectures embrace a study of the evolution of society as affected by food conditions; second, a study of the food principle and their classification; third, the functions of the various foods; fourth, chemistry as applied in the study of the science of nutrition; fifth, the history and manufacture of food material, etc.; sixth, the care and use of ordinary utensils and furnishings. Parallel readings are required. Laboratory work includes experimental work with foods and the preparation and serving of typical foods of certain classes. Five hours credit. M., W., 9 and Tu., W., 1 to 4. Miss Stoner.
2. **Food Economics.** Second term. This includes a continuation of the subject outlined in Course 1, and marketing, table setting and serving. By lecture and research work, the relative nutritive and money values of food are considered. Each student prepares a weekly dietary for

the family. The amount expended is limited by the instructor. United States Agricultural Bulletin standards are used. Parallel readings are required. Laboratory work is a continuation of Course 1. Five hours credit. M., W., 9 and Tu., W., 1 to 4. Miss Stoner.

3. **Advanced Food Economics.** Third term. This subject includes advanced work in Food Economics, general dietetics, high-grade work in the preparation of foods, and a brief study of the preservation of foods. Parallel readings are required. Five hours credit. M., W., 9 and Tu., W., 1 to 4. Miss Stoner.
4. (a) **Preservation of Foods.** One half term.
(b) **Hygiene of Clothing.** One half term.

First term.

- (a) Continuation of Course (3). Includes a brief study of the causes of decomposition; a history of the methods employed in the preservation of foods; the economic value of canned foods and the principles involved in canning, preserving, etc.
 - (b) Includes a study of the structure of fibers and their proper treatment; the properties and cleansing effects of water and soap; the effect of blueings, etc. Experimental work with chemical reagents for the treatment of all kinds of stains, etc., and the use of disinfectants and their properties. Lectures on hygienic clothing and the proper care of all kinds of house linens, etc. Demonstration work in practical laundry methods. Five hours credit. Tu., Th., 11 and Th., F., 1 to 4. Miss Stoner.
10. **Household Economics.** Third term. A consideration of the best location for a house; its hygienic and sanitary construction and arrangement. A consideration of water supplies, sanitary drainage, care of plumbing, etc. Discussion of approved methods of the management of lighting, heating and ventilation systems. A study of the best practical and scientific methods of general household management. Furnishings of the home from the standpoint of utility, sanitation and economy. A study of household accounts and expenditures, etc. Two and one-half hours credit. Tu., Th., 9. Miss Stoner.
 11. **Therapeutic Diet and Emergency Work.** Second term. The lectures, demonstrations and practical work are designed to set forth the principles of the dietetic treatment of various diseases and to consider such emergency cases as frequently require prompt treatment in the home, as well as the principles underlying good nursing. Food suitable for infants, invalids and convalescents is prepared in the laboratory work. Parallel readings are required. Two and one-half hours credit. Tu., 9 and Th., 1 to 4. Miss Stoner.
 12. **Theory and Practice of Domestic Science.** Third term. Elective. This course is designed for young women who desire to take special professional training in Home Economics and who wish to study the educational, economic, scientific and practical principles involved in the application of those subjects in professional work. Parallel readings are required. Students electing this work must have completed courses 1, 2, 3, 4, 10 and 11. Five hours credit. M., F., 10 and Th., F., 1 to 4. Miss Stoner.

DOMESTIC ART

5. **Lectures on the Industrial and Artistic Evolution of Society.** Second term. History of the early races considered with special reference to the development in culture gained through hand-work. Practice work, preparation of a series of models comprising the different stitches used in plain hand sewing. Five hours credit. Recitations, Tu., Th., 11, and practice periods Th., F., 1 to 4. Miss Souther.

6. **Lectures on Textiles.** Third term. Study of vegetable fibers; their growth and the processes of their manufacture. Comparative economic value of fabrics. Practice work; machine and hand work on underwear; drafting from simple measurements; use of patterns; making of simple straw hats and bows. Five hours credit. Tu., Th., 11 and Th., F., 1 to 4. Miss Souther.
7. **Lectures on Textiles.** First term. Study of animal fibers; treatment of wool and silk fabrics; hygienic and artistic dress; consideration of line, form and color. Practice work: Costume designing in pencil and water color; drafting patterns by use of Tailoring System. Cutting and Fitting. Making of hat frames, covering and trimming the same. Four hours credit. M., 9 and Tu., W., 1 to 4. Miss Souther.
8. **Lectures on History of Art and Architecture and Historic Costumes.** Second term. Practice work: Making of a lined waist; cutting and fitting of dress skirts. Four hours credit. M., 9 and Tu., W., 1 to 4. Miss Souther.
9. **Lectures on Historic Art and on the Decoration of the House.** Third term. Practice work: Making of a tailored skirt and jacket. Four hours credit. M., 9 and Tu., W., 1 to 4. Miss Souther.

ECONOMICS AND SOCIOLOGY

University Hall, Rooms 17, 18, 20, 29

Professor Clark, Assistant Professor Hagerty.

Undergraduate Courses

1. **Elements of Political Economy.** A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Text-book, lectures and individual investigations. In the Economics-History group an option is given. It is desirable that students who do not come well prepared in history and with a fair amount of general knowledge of economic principles take courses 2, 3, 4, deferring course 1 to their second year. Law students will find this course well adapted to their work. Three hours credit, through the year. Sec. 1, M., W., F., at 8; Sec. 2, M., W., F., at 9. Assistant Professor Hagerty. This course should precede all courses except 2, 3, 4.
2. **The History of Industrial Society.** A general view of the evolution of modern industrial society; involving a study of the manorial and guild systems; of the rise of class interest; the formation of trading companies; land-holding; labor laws; the development of capitalistic enterprise and the economic legislation, ideas and theories that grew out of these conditions; with special reference to England from the eleventh century. Text book, lectures and assigned readings. First term. Three hours credit. Courses 2, 3, 4 are open to all students of the University without preliminary requirements. M., W., F., at 9. Professor Clark.
3. **Industrial and Financial History of the United States.** A complete survey of American industries, financial resources and policies. Lectures and assigned readings. Three hours credit. Second term. M., W., F., at 9. Professor Clark.
4. **Transportation.** A study of the development and present economic status of roads, canals and railroads in their relation to industry, society and to the state. Three hours credit. Third term. Lectures and assigned readings, M., W., F., at 9. Professor Clark.
5. **Practical Problems: Immigration, Money, Land.** First term. Tu., Th., at 9. Two hours credit. Prerequisites, 1, or 2, 3, 4. Professor Clark.

6. **Practical Problems: Railroads, Tariff, Crises.** Two hours credit. Second term. Tu., Th., at 9. Should be preceded by course 5. Professor Clark.
7. **Practical Problems: Labor and Capital.** Under the head of labor are discussed the problems of co-operation, profit-sharing, strikes, eight-hour day, trade unions, etc. Under the head of capital are discussed the problems of municipal ownership of quasi-public utilities, and capitalistic production. Should be preceded by course 6. Two hours credit. Third term. Tu., Th., at 9. Professor Clark.
8. **Public Finance and Taxation.** This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Text-book, (Adams, Finance) and lectures. Two hours credit. First and second terms. Tu. and Th., at 2. Assistant Professor Hagerty.
9. **Money, Credit and Banking.** This course involves the history and theory of the subject, a comparative study of the monetary systems, currency, etc., together with the various methods of banking; national banks; clearing house system, etc.; with a critical analysis of proposals for reform. Lectures and collateral readings. Two hours credit. Third term. Tu., Th., at 2. Assistant Professor Hagerty.
10. **Commerce.** The scope of this course is seen in the following arrangement of the work. First term: History and Geography of Commerce. Second term: Theory and Technique of Commerce. Third term: Art of Commerce. The aim is decidedly practical and it is suggested that the student might with profit coordinate it with one or more of the following courses: Botany 7; Chemistry 32; Drawing 1; Geology 6; Political Science 4 and 5; and certain courses in Law. This course must be preceded by course 1, and either 2, 3, and 4; or 5, 6, and 7, and is to be elected in the third year. It should accompany 8 and 9 and be followed in the fourth year by 18, 19, and 17e. Lectures, practical investigations and reports. Three hours credit. Through the year, M., W., F., at 11. Professor Clark.
11. **Sociology.** Text-books, lectures and original investigations. Through the kindness of the various officers of the Godman Guild House opportunity will be provided students in this course in doing practical work at the guild, and the State Board of Charities as well as the officers of the Associated Charities of the city are enlisted in the work of this course. Three hours credit. First and second terms. M., W., F., at 1. First term: Giddings' Elements of Sociology. Second term: Henderson's Dependents, Defectives and Delinquents. It should be preceded by 2, 3, 4, or 1. Assistant Professor Hagerty.
12. **The History and Theory of Socialism.** A complete study of the subject in its historical, economic and critical aspects. The socio-economic doctrines of the philosophers, the Utopias of Plato, More, Campanella, Cabet, etc., and the theses of the various German, French and English schools of socialists, will be treated. The origin of private property, the right to labor, rights of industrial classes, and the modern distributive processes will be analyzed. Syllabus, lectures and collateral readings. Two hours credit. Second and third terms. Tu., Th., at 11. Professor Clark.
13. **Sociology and Statistics.** Lectures and laboratory work. Text, Mayo-Smith's Sociology and Statistics. This course may be taken separately or accompany course 11, 22, or 21. One hour credit. Through the year, F., at 10. Assistant Professor Hagerty.
14. **Economic Literature and Legislation.** A round-table study of current industrial affairs; reviews of magazine articles, books, bills, etc. Course 14 may be taken separately or accompany course 10, 18 or 20. Students should take this course in their third year with a view to course 15 the following year. One hour credit. Through the year, Th., at 8. Professor Clark.

15. **Seminary in Economics.** Two hours credit, through the year, M., 3-5. Students must take this course in their fourth year. Open to graduates and advanced under-graduates on permission of the head of the department. Should be preceded by courses 14, or 20, 12. The work for the ensuing year, 1903-1904, is outlined as follows: At each alternate meeting a practical problem will be presented and discussed. The other meetings will take up the study of Classical Economists: English, German and American. Those contemplating taking the course should arrange for this work in advance and receive their assignments. Professor Clark.
16. **Thesis Work.** Two hours credit, three terms. In this work, as far as possible, only original sources are used, and investigations made from real life. The aim is to set before each student the accomplishment of the task of extending in some degree, however slight, the boundaries of economic and sociological knowledge. Meetings are arranged with the instructor throughout the year. This course may accompany 17. Professor Clark.
18. **Business Laws and Forms.** Text-book, lectures and laboratory work. May be taken in connection with course 10. Two hours credit. First and second terms. Tu. and Th., at 11. Professor Clark. (Omitted in 1903-1904.)
19. **Corporation Problems.** This course aims at a complete analysis of the subject in both its theoretical and practical aspects. Trusts, Mergers and capitalistic forms of organization in general come under discussion. It follows course 18. Two hours credit. Third term. Tu. and Th., at 11. Professor Clark. (Omitted in 1903-1904.)
20. **Economic Thought.** Text-book and lectures. First term. Tu., Th., at 11. This course must be preceded by 1, and 2, 3, 4, and should be taken in the third year. Professor Clark.
21. **Growth and Development of Social Thought and Institutions.** A study of the contributions to social theory of Plato, Aristotle, Aquinas, Comte, Spencer, Ward, Tarde, Giddings, etc. The third term will be devoted to a study of English Social Pioneers. This course should be preceded by courses 2, 3, 4 and 11, 22. Tu., Th., at 10. Two hours credit, through the year. Lectures and reports. Assistant Professor Hagerty.
22. **Primitive Society.** This course must be preceded by course 11. Text-book: Tyler's Anthropology. Three hours credit. Third term. M., W., F., 1. Assistant Professor Hagerty.

GRADUATE COURSES.

17. **Advanced Economics.** From one to ten hours credit, through the year. Hours arranged with students individually. Open to under-graduates only on permission of the head of the department. The aim of these courses is to offer the student an opportunity to specialize to any degree he may desire along the various lines within the field of the department. Elections will naturally fall under the following heads:
 - (a) Theoretical problems. (b) Historical problems. (c) Practical problems. (d) Finance. (e) Commerce. (f) Sociology (Theoretical or Practical). (g) Statistics. (h) Teacher's Course and Training for Fellowship.

When several students elect the same line of work, they may constitute themselves a group and a *Seminary* will be organized as a nucleus for such work. A *Seminary in Sociology* (17f) is announced for the year 1903-4. Students should give notice in advance if they desire to enter this course. Tu., 3-5. Professor Clark and Assistant Professor Hagerty.

EDUCATION

University Hall, Rooms 51 and 54.

ASSOCIATE PROFESSOR MAJOR, ASSISTANT PROFESSOR HAINES.

1. **Educational Psychology.** The aim of this course is to make a thorough study of laws and principles selected from standard psychological literature which seem to bear upon educational theory and practice. Emphasis is laid upon the function of psychology in determining the selection and arrangement of school studies as well as upon its bearing on class-room procedure. The work of the first two terms will be based on James' Talks on Psychology and Adams' Herbartian Psychology supplemented by reference to standard psychological and educational literature. The course will include such topics as: The physical basis of mental life, native impulses and interests, habit, association of ideas, interest and attention, imitation and suggestion. The work of the third term will consist of a study of normal mental types, a description of the so-called stages of mental development, special topics in mental pathology. Open to second year students. Three hours credit. Three terms. M., W., F., at 11. Associate Professor Major.
2. **Introduction to Educational Theory.** The chief purpose of this course is to enable the student to understand the nature of present day educational problems and to arouse interest in their critical study. An effort is made also to establish a body of educational principles derived from ethics, psychology, biology and sociology. The following topics will indicate the general nature of the course: Education as a science; the aim of education; educational values; the relation of psychology to education; the meaning and value of child-study; the learning process; stages of mental development; the selection and arrangement of school studies; prescribed and elective courses of study. Two hours credit. Three terms. T., Th., at 10. Associate Professor Major.
3. **History of Education.** This course gives an account of the most important educational movements and systems beginning with the oldest culture nations and concluding with a study of the present trend of education in this country and Europe. Constant reference is made to the influence of religious, political and social ideas in controlling a people's educational aims and methods; Greek education; the rise of the universities; the Renaissance; the Reformation and education; the rise and development of humanism; the development of modern theories and systems of education. Should be preceded or accompanied by European history, 1, 2, 3. Three hours credit. Three terms. M., W., F., at 2. Assistant Professor Haines.
4. **Child Study.** The first part of this course is designed to present the general facts and laws of physical growth and development with special reference to school hygiene. The following topics indicate the nature of this part of the course: Laws of bodily development, development of the nervous system, defects of sight and hearing, the fatigue problem. Principal references: Donaldson's Growth of the Brain, Warner's Study of Children, Rowe's Physical Nature of the Child. The second part of the course aims to describe the characteristic features of child mind, to study the principles and empirical data of mental development with special reference to educational theory and practice. The course includes a study of typical definitions of mental development, the theory of nascent periods, children's imagery, types of children, mental defects and abnormalities, the value of laboratory tests of mental ability. Principal references: Pedagogical Seminary; Trans. Ill. Soc. for Child Study; Educational Review; Sully's Studies of Childhood; Barnes' Studies; Baldwin's Mental Development. Two hours credit. Three terms. M. and F., at 10. Associate Professor Major.
5. **Science of Education.** This course aims to afford a wide view of the science of education, endeavoring to develop a consistent theory of

education. It is especially intended for students who expect to deal with the larger problems of education which confront the superintendent or principal. It means to widen the horizon and at the same time orient the student in this larger world. But all teachers should have this enlarged view and intelligent grasp of the fundamental problems of education, to make them masters of their craft. It should help all specialists to see the place of their particular grade or subject in the developmental process of the individual pupil. It is an essential part of the professional training of the teacher. Philosophy 18, 19, and education 1, 2 or 3 must precede this course. Lectures, readings and reports. Three hours credit. Three terms. M., W., and F., at 11. Assistant Professor Haines.

6. **Modern Educational Systems.** A comparative study of the educational systems of Germany, England and France. The course will deal briefly with the history of these systems, but chiefly with their present organization. The interest centers in the secondary education of those countries, and so the course will appeal chiefly to prospective high school teachers, or those who will be called upon to organize and develop high schools. Russell's German Higher Schools, Balfour's Educational Systems of Great Britain and Ireland, and the Reports of the U. S. Commissioner of Education constitute the essential literature for the course. Lectures, reading and reports. Two hours credit. T. and Th., at 2. Associate Professor Major.
7. **Secondary Education.** The history, curriculum, organization and administration of secondary education in the United States. After making a short study of the historical development of secondary education in the United States, the course will be concerned mainly with the problems of the public high school and will include a consideration of the various functions of the high school; the educational value and arrangement of the high school studies now generally accepted; the demand for changes in the contents and organization of the high school curriculum. A study of the Reports of the Committee of Ten and of the Committee on College Entrance Requirements will form an important feature of the course. The course is intended primarily for those who are preparing to become high school teachers or principals. Open to third and fourth year students, and graduates. Two hours credit. Three terms. T., Th., at 11. Associate Professor Major.
8. **Educational Classics.** The aim of this course will be to make a critical and comparative study of such classics as Plato's Republic, Rousseau's Emile, Pestalozzi's Leonard and Gertrude, Froebel's Education of Man, Herbart's Science of Education, Spencer's Education. Lectures, readings and reports. Two hours credit. Three terms. M. and W., at 2. Associate Professor Major.
9. **Seminar.** Designed for students who wish to investigate special problems in education. Members of the course will work independently, but will meet once a week for general discussion of some subject under investigation. Open only to fourth year students and graduates who have worked extensively either in philosophy or education. Two hours credit. Three terms. F., 2-4. Associate Professor Major.

ELECTRICAL ENGINEERING

Office, Electrical Building, Room 8

PROFESSOR CALDWELL, ASSISTANT PROFESSOR FISH, MR. BROOKS.

6. **Electrical Engineering.** Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and their applications. Two hours credit. (Course in Architecture, third year; Courses in Civil, Mechanical and Mining Engineering, Industrial Arts and Manual Training, fourth year, first and second terms; Course in Chemical Engineering, fourth year, first term. M., Th., 10.) Professor Caldwell.

7. **Electrical Engineering.** Laboratory work on the subjects treated in Course 6, which it accompanies. Two hours credit. Fourth year. Assistant

Professor Fish.

First term—S. 8-12. Course in Chemical Engineering.

W. 1-5. Course in Industrial Arts.

W. 1-5. Course in Manual Training.

W. or F. 1-5. Course in Mechanical Engineering.

M. 1-5. Course in Mining Engineering.

Second term—M. or W. 1-5. Course in Civil Engineering.

F. 1-5. Course in Industrial Arts.

F. 1-5. Course in Manual Training.

F. 1-5 or S. 8-12. Course in Mechanical Engineering.

W. 1-5. Course in Mining Engineering and Architecture.

(Course in Architecture, third year, second term, W., 1-5.)

8. **Direct Current Dynamo Machinery.** Generators and motors, their theory, construction and operation. Lectures, recitations and problems. Four hours credit. (Course in Electrical Engineering, third year, second term, M., Tu., Th., F., 9.) Professor Caldwell.
9. **Elementary Dynamo Laboratory.** Handling and testing of circuits, generators, motors, etc. Four hours credit. (Course in Electrical Engineering, third year, third term, W., Th., 1-5; or F., 1-5, S., 8-12.) Assistant Professor Fish.
10. **Alternating Current Circuits and Machinery.** Single phase and polyphase generators, motors, transformers and other apparatus. Lectures, recitations and problems. Three hours credit. (Course in Electrical Engineering, fourth year; first term, M., W., F., 11; second term, M., W., F., 8.) Professor Caldwell.
11. **Advanced Dynamo Laboratory.** Continuation of the work begun in Course 9, together with alternate current apparatus, telephone apparatus, accumulators, lamps, etc. Three hours credit. (Course in Electrical Engineering, fourth year; first term, Tu., Th., 10-5; second term, Tu., Th., 10-5; third term, M., T., 1-4.) Assistant Professor Fish.
12. **Electrical Transmission and Distribution.** Systems, operation and apparatus. Two hours credit. (Course in Electrical Engineering, fourth year, second term, Tu., Th., 8.) Professor Caldwell.
13. **Application of Electricity.** Brief treatment of the elements of lumination, street railway work, telephone, electro-metallurgy, mining, etc. The seminary method is used in this course to the extent of each student writing one paper on some assigned subject, and reading the same before the class. Five hours credit. (Course in Electrical Engineering, fourth year, third term, M., Tu., W., Th., F., 8.) Professor Caldwell.
14. **Electrical Design.** Includes wiring of buildings, direct and alternate current generators, transformers, distribution, etc. Four hours credit. (Course in Electrical Engineering, fourth year; second term, M., Tu., 1-4, W., 1-3; third term, W., 1-3, Th., F., 1-4.) Professor Caldwell.

ENGLISH LITERATURE

University Hall, Room 31

PROFESSOR BARROWS, ASSOCIATE PROFESSOR TAYLOR.

Course (1) is prerequisite to all other courses, except those in the Bible. Most of the required texts of the poets and prose writers included in these courses, except Shakespeare, the Bible and novels, can be obtained of the department at a very moderate charge.

UNDERGRADUATE COURSES.

1. **An Introduction to English Literature.** Three hours credit, through the year. Includes: (1) A review of the development of English literature: for this part of the work, Scudder's Introduction to English Literature is covered in three examinations. (2) Lectures on the elements of literary analysis and interpretation. (3) Critical study of selections characteristic of different authors and of various periods, to secure acquaintance with literary problems, to cultivate perception of literary qualities, and to verify the assertions of the lectures. The book first required for this part of the work is Palgrave's "Golden Treasury." Two sections: Sec. 1, M., W., F., at 8; Sec. 2, M., W., F., at 9. Professor Barrows.
2. **From Spenser to Milton, exclusive of the Drama.** Two hours credit, first term. This course includes a special study of the Elizabethan Lyrics. Tu., Th., at 1. Associate Professor Taylor.
3. **From Dryden to Pope, exclusive of the Drama.** Two hours credit, second term. Particular attention is given to "The Rape of the Lock." Tu., Th., at 1. Associate Professor Taylor.
4. **The Age of Johnson, exclusive of the Drama.** Two hours credit, third term. This course is mainly a study of the essayists of the Eighteenth Century. Tu., Th., at 1. Associate Professor Taylor.
5. **Prose from Burke to the Victorian Age.** Three hours credit, first term. M., W., F., at 1. Professor Barrows.
6. **Poetry from Burns to the Victorian Age.** Three hours credit, second and M., W., F., at 1. Professor Barrows.
These courses offer a survey of the literature of the early nineteenth century. Lectures on the rise of the romantic spirit; on the development of thought in this period; on the relation of authors to each other and to the times; and on the significance of their writings. Critical study of selections.
18. **Victorian Literature.** Two hours credit, through the year. The work of each term may be taken separately. The studies are as follows: In the first term, Tennyson; second term, Browning; third term, which is open to change, in 1903-4, Arnold, Swinburne and Rossetti. Tu., Th., at 2. Associate Professor Taylor.
7. **The English Bible: The Pentateuch and Earlier Histories.** One hour credit, through the year. Given in 1904-5.
8. **The English Bible: Later Histories, Poetry and Prophecies.** One hour credit, throughout the year. Given in 1902-3. Th., at 8. Professor Barrows.
9. **The English Bible: The New Testament.** One hour credit, through the year. Th., at 8. Professor Barrows. Offered in 1903-4.
No other study in this department is prerequisite to these courses in the Bible; they are open to all students in the University, subject to the approval of the appropriate Executive Committee. Required text: The Revised Bible.
10. **The Drama from the Beginning to the Closing of the Theatres.** Three hours credit, through the year. In the first term Shakespeare's plays are read, with no more reference to philology and history than is necessary to an understanding of the text, and various problems of dramatic art are discussed in connection with the plays that best illustrate them. In the second term Shakespeare and the best Elizabethan plays are studied in the same way, and there is a course of lectures on the development of the drama. The study of Shakespeare is continued in the third term. M., W., F., at 3. Professor Barrows.

11. **The Modern Novel.** Three hours credit, first and second terms. In the first term Scott, in the second term Dickens and Thackeray will be read. M., W., F., at 2. Associate Professor Taylor.
12. **American Authors.** Three hours credit, third term. Poe, Hawthorne, Emerson and Lowell are the chief studies. M., W., F., at 2. Associate Professor Taylor.
13. **Chaucer.** Three hours credit, first term. M., Th., F., at 10. Professor Barrows.
14. **Milton.** Three hours credit, second term. M., Th., F., at 10. Professor Barrows.
15. **Modern Plays.** Three hours credit, third term. Selected plays by Dryden, Goldsmith, Sheridan, Knowles, Browning and one living author. M., Th., F., at 10. Professor Barrows.
17. **Masterpieces: A Study of Literary Types.** Three hours credit, through the year. Open to undergraduates who have taken not less than twelve term-hours of elective work in this department, and to graduates who have done an equivalent amount of work in literature. The study is of the origin and development of literary types, the best examples in English being chosen for basis. Associate Professor Taylor.
19. **Current Literature.** Two hours credit, through the year. Open only to graduates and to undergraduates in the fourth year who have taken two elective courses in this department. The study is of poetry the first term, and of the novel the second and third terms. M., F., at 10. Associate Professor Taylor.

GRADUATE COURSES.

The hours assigned to these graduate courses may be changed, if necessary.

16. **Literary Problems.** Two hours credit, through the year. A series of studies of the fundamental problems of criticism. Lectures followed by illustrative readings selected from the entire range of our literature: written reports and discussions. Tu., Th., at 3. Professor Barrows.
23. **Special Investigations.** Two hours credit, through the year. This course is designed for those who wish to make an extended investigation of a literary topic. The work will be either (a) a continuation of course 16 open to those who are taking or have taken that course; or (b) an enlargement of course 17 open to those who are enrolled in course 17. (a) F., at 1; Professor Barrows. (b) F., at 4; Associate Professor Taylor.
20. **Translations.** Two hours credit, through the year. A study of the indebtedness of English to other literatures, and of various problems of general literature. Tu., at 2. Professor Barrows.
21. **Masterpieces: A Course for Teachers.** Five hours credit, through the year. Lectures in outline, to be developed by the student, on the literary aspects of each period, biographical studies of the authors of the masterpieces studied; extended criticism of masterpieces selected in consideration of their importance in the development of literature, and taken up in chronological order. An advanced review of the subject, designed for those who intend to become teachers. Th., at 2. Professor Barrows.
22. **The Development of Literary Types.** Three hours credit, through the year. A course in comparative criticism, the types in English literature being referred to their models in classic or romance literature. It calls for a reading knowledge of French or German, and some acquaintance with Greek and Roman literature. In 1903-4 the studies will be as follows:

first term, the pastoral; second term, the romance; third term, the novel. Seminary method is followed. M., at 4. Associate Professor Taylor.

24. **Shakespeare: An attempt at Complete Literary Criticism.** Two hours credit, through the year. Hours to be arranged. Associate Professor Taylor.

ENTOMOLOGY

(See Zoology and Entomology.)

EUROPEAN HISTORY

University Hall, Rooms 7, 36.

PROFESSOR SIEBERT, MR. MCNEAL.

The courses of instruction in this department are divided into three groups: (1) the general courses in Ancient, Continental and English history (courses 1, 2 and 3; 14; 5 and 6); (2) the advanced courses, dealing in a fuller way with special periods and phases of the subject (courses 4, 7, 8, 9, 10, 11, 12, 15, 16 and 18); and (3) those courses intended to acquaint the student with the principles and method of resesarch (courses 20 and 21).

The general courses are intended to meet the needs of four classes of students: (a) those desiring only a general knowledge of European history; (b) those looking forward to advanced work in the department; (c) those studying Greek and Latin (see courses 5 and 6); and (d) those expecting to specialize in the line of American history, or to enter upon a legal or business career. For the fourth class courses 4 and 14 are especially recommended.

The advanced courses are intended to acquaint those qualified to enter them with an intimate knowledge of the special period or subject concerned, to give the student a comprehensive acquaintance with the best authorities, and practice in the written and oral exposition of assigned topics. Courses 1, 2 and 3 must precede these advanced courses, except that course 4 should be preceded by Course 14.

1. **The Early Middle Ages.** The history of Europe to 1300, including the establishment of the mediæval empire, the formation of the separate states, the rise of the Christian church, the crusades, and the conflict of the empire with papacy. Lectures, recitations and assigned readings. Bimont and Monod, *Europe* to 1328. Three hours credit a week, first term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.
2. **Renaissance.** The history of Europe from 1300 to 1500, giving an account among other things of the revival of learning, the revival of commerce and industry, and the voyages of discovery. Lectures, recitations and assigned readings. Three hours credit, second term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.
3. **Modern Europe.** A general survey of European history from 1500 to the present time, including the Reformation, the rise of Russia and Prussia, the English and French revolutions, and the unification of Italy and Germany. Lectures, recitations and collateral readings. Schwill's *Modern Europe*. Three hours credit, third term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.
4. **Political and Constitutional History of England.** This course is designed to give the student an intimate knowledge of the development of the English constitution from its Germanic beginnings, and an acquaintance with the literature of the subject. It will be found serviceable for those intending to do special work in American History or Political Science, and for those who expect to study law. It must be preceded by Course 14 or Courses 1, 2, 3. Three hours credit, three terms, M., W., F., at 8. Professor Siebert.

5. **Political and Social History of Greece to the Roman Conquest.** A short course introduced by a few lectures on ancient oriental history. Lectures, text-book and assigned readings. Botsford's History of Greece. Two hours credit, first term. Tu., Th., at 9. Mr. McNeal. Given biennially. Omitted in 1903-1904.
6. **Roman History and Institutions to the End of the Republic.** This course, together with Course 5, is intended especially to meet the needs of students taking Latin and Greek, and those preparing to teach ancient history in the schools. Lectures, recitations and special reports. Tu., Th., at 9. Mr. McNeal. Given biennially. Omitted in 1903-1904.
7. **Period of the Protestant Reformation.** Open to those who have had Courses 1, 2 and 3. This is an advanced course, and deals with reformational movements from the time of the death of Dante (1231), to the Council of Trent (1562). Lectures, collateral reading and investigations. Three hours credit, first term. M., W., F., at 2. Professor Siebert. Given biennially. Omitted in 1904-1905.
8. **The French Revolutionary and Napoleonic Periods, 1789-1815.** Open to students who have had Courses 1, 2 and 3. An intensive study of the causes and effects of the French Revolution, and of Napoleon's struggle with Europe. Lectures, collateral reading and special reports. Three hours credit, second term. M., W., F., at 2. Professor Siebert. Given biennially. Omitted in 1904-1905.
9. **History of Europe in the Nineteenth Century.** Open to students who have had courses 1, 2 and 3. Lectures, assigned readings and topical reports. Three hours credit, third term. M., W., F., at 2. Professor Siebert. Given biennially. Omitted in 1904-1905.
10. **History of European Colonies.** Open to students who have had Courses 1, 2 and 3. A study of the colonial enterprises of Portugal, Spain, England, the Netherlands, France and Germany. This course begins with the age of geographical discoveries and traces the evolution of colonies to the present time. Lectures, assigned readings and investigations. Three hours credit, first and second term. M., Tu., F., at 10. Professor Siebert.
11. **The Eastern Question.** An advanced course treating of the relations of European powers with Turkey and Russia by means of lectures, topical reports and required readings. Open to students who have had courses 1, 2 and 3. Course 9 gives a special preparation for this course. Three hours credit, third term. M., Tu., F., at 10. Professor Siebert.
12. **Constitutional History of France.** From the ninth to the middle of the eighteenth century. Origin and development of the feudal system in France, growth of the French monarchy, French institutions before the Revolution. Lectures, required reading, reports. Two hours credit, three terms. Students must be able to read French. Courses 1, 2, 3 prerequisite. Tu. and Th., at 9. Mr. McNeal. Given biennially. Omitted in 1904-1905.
14. **Narrative History of England.** General course in the History of England intended especially for those wishing to take up Course 4 in this department, and for those intending to work in American history or English literature. Lectures, text-book and reports. Three hours credit, three terms. M., W., F., at 8. Mr. McNeal.
15. **History of North-Eastern Europe.** This course will deal with Denmark, Sweden, Poland and Russia from the fifteenth century. Courses 1, 2 and 3 are prerequisite. Lectures and reports. Two hours credit. First and second terms, Tu. and Th., at 9. Professor Siebert. Given biennially. Omitted in 1903-1904.
16. **Europe and the Asiatic Question.** Origin and development of the interests of the various European states in the Far-East. Lectures and reports.

Courses 1, 2 and 3 are prerequisite. Two hours credit, third term. Tu. and Th., at 9. Professor Siebert.
Given biennially. Omitted in 1903-1904.

18. **History of Mediaeval Civilization.** A study of institutions and customs in Western Europe during the Middle Ages; primitive Germanic conditions, social and economic features of the Frankish Kingdom and Empire, monasticism, origins of feudalism, etc. Lectures, readings, reports. Three hours credit, three terms. M., W., F., at 3. Courses 1, 2, 3, prerequisite. Mr. McNeal.
Given biennially. Omitted in 1904-1905.
20. **Historical Method and Documentary Sources of the Middle Ages.** An outline of the principles of historical research and criticism; the bibliography of history; a study of mediaeval sources, German tribal laws, capitularies, charters, formulæ, etc. Two hours credit, three terms. Courses 1, 2, 3, prerequisite. Tu., 3-5. Mr. McNeal.
21. **Investigations of Special Topics in Modern European History.** Open to those students who are able to satisfy the instructor as to their fitness to pursue the course. Two hours credit. Th., 3-5. Professor Siebert.

FRENCH

(See Romance Languages and Literatures.)

GEOLOGY

Orton Hall, Rooms 1, 4, 5, 7 and 13.

PROFESSOR PROSSER, PROFESSOR BOWNOCKER.

1. **Physiography.** The topographic features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Recitations, lectures, map work. Five hours credit. (Short Courses in Mining and Clay Working, first year; Short Course in Industrial Arts, second year, third term. M., Tu., W., Th., F., 11.) Professor Bownocker.
2. **General Geology.** Structural, historical and dynamical geology. Four hours lectures and recitations, and two hours laboratory and field work. In the laboratory, Dana's Manual of Geology, the Ohio Geological Reports and characteristic fossils will be studied. In the field, specimens will be collected, sections measured, formations identified and the student given an idea of the methods of work pursued by a field geologist. Field trips, mainly on Saturdays. Five hours credit. (Courses in Architecture, Ceramics, Civil and Mining Engineering, fourth year; Short Course in Clay-Working, second year, first term, M., Tu., W., Th., F., 11.) Professor Prosser.
4. **Elementary Geology.** Lithological, dynamical, structural and historical geology. Recitations, lectures, laboratory work. Five hours credit. (Short Course in Mining, second year, second term, M., Tu., W., Th., F., 9.) Professor Bownocker.
5. **Applied Geology.** Second term. The common minerals and rocks composing the earth's crust, their disintegration and decomposition. Soils, their origin and classification; the soils of the United States and especially those of Ohio. Fuels, coal, oil and gas. Building stones, limes and cements. Iron and the most useful metals. Three and one-half hours credit. Lectures, M., Tu., W., 8; laboratory, Th., 8. Professor Bownocker.
6. **Economic Geology.** Lectures and assigned reading. The nature of ores, their classification and origin. The metals of the United States, their

distribution, abundance, modes of occurrence and origin. The non-metals, coal, oil, gas, clay, lime, cement, building stone, etc. In the discussion of the non-metals emphasis will be laid on the products of Ohio. Three hours credit. (Courses in Architecture, Ceramics, Civil and Mining Engineering, fourth year; Short Course in Clay-Working, second year, second term. M., W., F., 11.) Professor Bownocker.

7. **Petrography.** Lectures and laboratory work. The ingenious, sedimentary, and metamorphic rocks—their origin and classification. The volcanic rocks of the Western United States—their composition, structure and alteration products. The object of this course is to give the student a practical acquaintance with rocks. Two hours credit. (Course in Mining Engineering, fourth year, second term, Tu., 9-11; Th., 9.) Professor Bownocker.
11. **Inorganic Geology.** Including lithological, dynamical and structural geology. Lectures, recitations, laboratory work and field exercises. The lectures are illustrated by lantern views, maps, models and specimens. Three hours credit, first term. M., W., F., at 9. Open to all. Professor Bownocker.
12. **Historical Geology.** A general course in paleontological and stratigraphical geology, with laboratory study of Dana's Manual of Geology, the Ohio Geological Reports and identification of characteristic fossils. The development of organisms and the classification and distribution of the geological formations are considered. Lectures, recitations and laboratory work. The lectures are illustrated by lantern views, maps and specimens. Three hours credit, second term. Prerequisites, course 11. M., W., F., at 9. Last half of term, laboratory, F., 8-10. Professor Prosser.
13. **Field Geology.** Field and laboratory study of the geological formations readily accessible from Columbus. This course is intended to acquaint the student with the ordinary methods of field investigation, and involves the collection and identification of specimens, the measurement of geological sections and the preparation of a report describing the region studied. Three hours credit, third term. Prerequisite, Courses 11 and 12. Field trips Saturdays. Laboratory open M., Tu., W., Th., and F., 8-12 and 1-4. Professor Prosser.
14. **Paleontology.** Careful training in systematic classification which may be used in the philosophical study of the development of plant and animal life, or as a means of becoming acquainted with the fauna and flora that characterize the various geological formations. At first the student devotes some time to conchology, studying recent shells in which the characters used in classification are well preserved, and after this preliminary work, fossils are studied. Fossils afford the most reliable data for identifying and correlating geologic formations, and the critical study of faunas is a field especially adapted to independent research. Laboratory, museum and field work. Two to five hours credit. Three terms. This course may be undertaken at the beginning of the second or the third term. Prerequisite or accompanying courses, 11 and 12. Laboratory open M., Tu., W., Th., and F., 9-12 and 1-4. Professor Prosser.
15. **Areal Geology.** Instruction in the methods of preparing geological maps and reports. The student compiles from a geological report a map with sections showing geologic structure, and later traces the outcrops and prepares a geological map of some region. Two to five hours credit, first and third terms. Prerequisite courses 11, 12, 13 and 14. Field work Saturdays, laboratory open M., Tu., W., Th. and F., 9-12 and 1-4. Professor Prosser.
16. **Advanced Historical Geology.** Work in paleontology and stratigraphical geology for students who have had courses 11, 12, 13 and 14. A written report is required which shall review the literature of the work undertaken and in addition show some scientific merit in the presenta-

tion of the results of the original investigation. Three to five hours credit, three terms. Field work to be arranged with individual students. Laboratory open M., Tu., W., Th. and F., 9-12 and 1-4. Professor Prosser.

17. **Physiography.** Introductory course. Study of the physiographic features of the earth's surface with special reference to North America; the agencies which produced these, and changes now in progress. The ocean and the atmosphere. The lectures illustrated by lantern views and maps. Three hours credit, three terms. M., W., F., at 1. Professor Bownocker.
18. **Geographic Geology.** The origin, development and destruction of topographic forms. Rivers, lakes, oceans, ice and winds as agents modifying the surface of the earth. Lectures, map work, field excursions. Three hours credit, third term. Prerequisite, course 11 or 17. Tu., Th., 9-10. Professor Bownocker.
19. **Petrography.** Laboratory and lectures. Optical crystallography, with practical determination of rock-forming minerals, macroscopically and microscopically. Study of the igneous rocks in the hand specimen and thin section. Two hours credit, three terms. The Sturtz rock collection and Voight Hockgesang thin sections of typical minerals and rocks will be studied. Books of reference:—Mitchel Levy—*Les Minneaux des Roches*; Rosenbusch—*Mikroskopische Physiographie der Petrographisch Wichtigen Mineralien*, 3d ed.; *Mikroskopische Physiographie der Massigen Gesteine*, 2d ed.; Teall's *British Petrography*; Spottiswoode's *Polarization of Light*. Prerequisites, Chemistry 1, Metallurgy 2, (Mineralogy and crystallography) elementary mineralogy. Five days, 1-4 Professor Bownocker.
20. **Research Work.** Field, laboratory and library study in Inorganic or Historical Geology. Outline of work and time to be arranged with individual students. Three to five hours credit, three terms. Preceding courses in Inorganic or Historical Geology are prerequisite. Professor Bownocker or Professor Prosser.

GERMANIC LANGUAGES AND LITERATURES

University Hall. Rooms 30 and 32.

PROFESSOR RHOADES, ASSOCIATE PROFESSOR MESLOH, MR. EISENLOHR, MISS BARROWS.

1. **Elementary German.** Four hours credit, three terms. This course is intended not only to lay a good foundation for the further study of German but also to help in forming proper habits of study. Sec. I: M., Tu., Th., F., at 10; Associate Professor Mesloh. Sec. II: M., Tu., Th., F., at 10; Mr. Eisenlohr. Sec. III: M., Tu., Th., F., at 11; Mr. Eisenlohr. Sec. IV: Tu., W., Th., F., at 2; Mr. Eisenlohr. Sec. V: Tu., W., Th., F., at 3; Miss Barrows.
2. **Science Reading.** Two or four hours credit, three terms. This course includes a topical review of the grammar, a study of stem groups for the purpose of developing and increasing the student's vocabulary, and the reading of Gore's *Science Reader*, Walther's *Meereskunde*, Trabert's *Meteorologie* and some book or books dealing with the specialty chosen by the student. Sec. 1: M., Tu., Th., at 8; Mr. Eisenlohr. Sec. II: M., Tu., W., Th., at 9; Associate Professor Mesloh.
4. **Intermediate German.** Four hours credit, three terms. Review of the Grammar; rapid reading of a number of novels; some lectures upon outlines of German literature; Composition. Sec. I: M., Tu., Th., F., at 10; Professor Rhoades. Sec. II: M., Tu., Th., F., at 11; Associate Professor Mesloh.

- *9. **Classical Drama and Prose.** Three hours credit, three terms. First term. After a rapid review of the development of the German drama from earliest times, special attention is given to the dramas of Lessing, Schiller, Goethe. In the second and third terms the development of German prose is studied, with special attention to the prose of Luther, Lessing, Goethe, Heine; Composition. Must be preceded by Courses 1 and 4. M., W., F., at 2. Professor Eggers.
10. **Modern Prose and Drama.** Three hours credit, three terms. First term: Some of the great prose-writers of Germany and of other Germanic countries will be studied. The second and third terms will be devoted to the study of the modern drama of Germany and other Germanic countries; Composition. Must be preceded by Courses 1 and 4. M., W., F., at 2. Professor Eggers.
11. **Faust I and II.** Two hours credit, three terms. The consent of the professor in charge will have to be secured. Students are expected to take both parts. Must be preceded by at least Courses 1 and 4. Tu., Th., at 11. Professor Eggers.
12. **Colloquial Exercises.** One or two hours credit, three terms. This course is designed especially for teachers. Some lectures upon methods of teaching German will be given toward the close of the course. M., F., at 11. Professor Eggers.
13. **Deutscher Aufsatz.** One hour credit, three terms. This course is designed especially for teachers. Original compositions will be written. Th., at 2. Professor Eggers.
14. **Gothic.** Two hours credit, first term. This course is purely linguistic and aims to lay a good foundation for subsequent work in language. The relation between Gothic and later dialects is emphasized. Wright's Gothic Primer will be used. W., F., at 8. Associate Professor Mesloh.
15. **Old High German.** Three hours credit, second term. A natural sequence to Course 14. The attention of the student is not only directed to the archaic forms and syntax but also to the best literary monuments. Wright's Old High German Primer. M., W., F., at 8. Associate Professor Mesloh.
16. **Middle High German.** Three hours credit, third term. Wright's Middle High German Primer. The poems of the Minnesingers, especially those of Walther von der Vogelweide, and one of the mediæval epics will be studied, principally from a literary standpoint. M., W., F., at 8. Professor Eggers.
- *17. **Old Norse.** Two hours credit, first term. Kahle's *Altislandisches Elementarbuch*. This course is intended as an introduction to the literature as well as the language. Some prose saga will be read. M., W., at 8. Associate Professor Mesloh.
- *18. **History of the German Language.** Two hours credit, second term. Beaghel's *Die Deutsche Sprache*. This course aims to give a sound knowledge of the historical development of the German language. W., F., at 8. Associate Professor Mesloh.
- *19. **Comparative Grammar.** Two hours credit, third term. Meringer's *Indo-germanische Sprachwissenschaft*. Henri's *Comparative Grammar of English and German*. After a general survey of the whole field the relation between English and German is carefully studied. W., F., at 8. Associate Professor Mesloh.
20. **Sanskrit.** Two hours credit, three terms. Perry's *Primer*; Lanman's *Reader*. Lectures introductory to the study of Indo-Germanic philology. Tu., Th., at 8. Associate Professor Mesloh.

* Not given in 1903-1904.

21. **Phonetics.** One hour credit, first term. A series of lectures discusses the nature of the various sounds of language, their production and inter-relation. A knowledge of German is not essential for this course. Associate Professor Mesloh. M., at 8.
22. **Deutsche Kulturgeschichte.** One hour credit, second and third terms. Tu., at 2. Professor Rhoades.
23. **Introduction to the Veda.** Three hours credit, first term. Lanman's Reader. Hillebrandt's Chrestomathy. M., W., F., at 1. Associate Professor Mesloh.
24. **Elements of Pali.** Three hours credit, second term. Frankfurter's Pali Handbook. Reading of selections from the Jatakas and the Dhammapadam. This course must be preceded by Sanskrit 20. M., W., F., at 1. Associate Professor Mesloh.
25. **Avestan.** Three hours credit, third term. Jackson's Avesta Grammar and Reader. Spiegel's Altpersische Keilinschriften. This course must be preceded by Sanskrit 20. M., W., F., at 1. Associate Professor Mesloh.
26. **Seminary A: Literary Criticism.** Two hours credit. Hours to be arranged Professor Rhoades.
27. **German Philosophy.** Two hours credit, three terms. Selections from the chief German philosophers will be read in the original. Open only to advanced students in philosophy. Professor Rhoades.
28. **German Ballads and Lyrics.** Two hours credit. With special attention to the Volkslied. Professor Rhoades.
- *29. **Seminary B.** Two hours credit. The subject for the year 1904-1905 will be Gothic. Associate Professor Mesloh.

GREEK LANGUAGE AND LITERATURE

University Hall, Rooms 37, 29 and 28.

PROFESSOR SMITH, ASSOCIATE PROFESSOR HODGMAN, ASSOCIATE PROFESSOR ELDEN.

First-year students coming to the University without preparation in Greek and desiring to study that language will enter Greek 1. For admission to Course 7 the student must have passed Course 1 or must be prepared at the time of admission as follows: Grammar: (Goodwin or Hadley-Allen) and Prose Composition; or White's First Greek Book entire. Reading: The first three books of Xenophon's Anabasis.

Courses 7-12 cover the work of two college years, and the consecutive numbering indicates the order in which the student is expected to take that work. The later courses, beginning with 13, are not necessarily in sequence, and are open to all who can show that they are qualified to pursue them with profit. This will be understood to mean the accomplishment of Courses 7-12 or an equivalent.

Courses 22 and 23 (on the history of ancient art) do not presuppose any knowledge of Latin or Greek; but are especially recommended to those who have studied one or both of these languages.

1. **Elementary Greek.** Four hours credit. M., Tu., Th., F., at 11. Associate Professor Elden. This course runs through three terms, and includes the work in White's First Greek Book, with the reading of three books of the Anabasis. It is intended to meet the wants of those who lack the preparation for the advanced courses, or those who wish, without pursuing the subject farther, to gain some acquaintance with the elements of Greek.
7. **Xenophon: The Memorabilia of Socrates; with Exercises in Greek Prose.** Four hours credit, first term. M., Tu., Th., F., at 11. Professor Smith.

*Not given in 1903-1904.

8. **Herodotus, Selections: with Studies in Greek History.** Four hours credit, second term. M., Tu., Th., F., at 11. Professor Smith.
9. **Homer's Odyssey, Selections from Books I-IX.** Four hours credit, third term. M., Tu., Th., F., at 11. Professor Smith.
10. **Lysias; Eight Orations; with Studies in Attic Procedure.** Three hours credit, first term. Tu., Th., F., at 10. Professor Smith.
11. **Plato: Apology, Crito and Phaedo (narrative portions),** Three hours credit, second term. Tu., Th., F., at 10. Professor Smith.
12. **Homer's Iliad.** Rapid reading of the first six books, with literary discussion of the Homeric poems. Only those who have taken Course 9 or its equivalent, will be admitted to this course. Three hours credit, third term. Tu., Th., F., at 10. Professor Smith.
13. **Thucydides: Book I or Book VII.** Three hours credit, first term. M., W., F., at 3. Associate Professor Hodgman.
14. **Demosthenes: Olynthiacs and Philippics.** Three hours credit, second term. M., W., F., at 3. Associate Professor Hodgman.
15. **Greek Lyric Poets, or Theocritus.** Three hours credit, third term. M., W., F., at 3. Associate Professor Hodgman.
- *16. **Attic Drama: Lectures and discussions.** Two hours credit, first term. Tu., Th., at 3. Associate Professor Hodgman.
- *17. **Euripides: Two plays.** Two hours credit, second term. Tu., Th., at 3. Associate Professor Hodgman.
- *18. **Aeschylus; the Agamemnon.** Two hours credit, third term. Tu., Th., at 3. Associate Professor Hodgman.
19. **Epic Poetry.** Lectures, with reading of Hesiod's Works and Days. Two hours credit, first term. W., F., at 2. Professor Smith.
20. **Greek Comedy.** Lectures, with reading of the Birds of Aristophanes. Two hours credit, second term. W., F., at 2. Professor Smith.
21. **Post-Classical Greek.** Lucian's Timon and Dion Chrysostom's Hunters of Euboea. Third term. Two hours credit. W., F., at 2. Professor Smith.
22. **Ancient Art.** Lectures on Architecture. Two hours credit, first term. Professor Smith.
23. **Ancient Art.** Lectures on Sculpture. Two hours credit, second term. Professor Smith.
24. **Private Life of the Greeks.** Lectures. Two hours credit, third term. Professor Smith.
25. **Greek Philosophy.** Lectures; with reading of Xenophon's Memorabilia (other portions than those in Course 7). Two hours credit, first term. Tu., Th., at 2. Professor Smith.
26. **Plato: Gorgias or Protagoras.** Two hours credit, second term. Tu., Th., at 2. Professor Smith.
27. **Studies in New Testament Greek.** Two hours credit, third term. Tu., Th., at 2. Professor Smith.
28. **Historical Grammar.** Lectures on the principles that govern the development of the language. One hour credit, three terms. Th., at 3. Associate Professor Hodgman.

*Not given in 1903-1904.

HISTORY

(See American and European History.)

ITALIAN

(See Romance Languages.)

HORTICULTURE

Horticultural Hall.

PROFESSOR LAZENBY, ASSISTANT PROFESSOR DAVIS.

1. **Elements of Horticulture.** First term. A study of the principles of plant growth and culture, including preparatory tillage, drainage, irrigation, weeds, insects, etc., in their relation to horticultural crops. Four and one-half hours credit. Lectures and recitations, M., T., W., 9 or 11; laboratory or practicum, Th., or F., 1 to 4.
2. **Vegetable Forcing.** Second term. A study of the history and development of different types of plant houses, including methods of heating, ventilating and general management. Four and one-half hours credit. Lectures and recitations, M., Tu., W., 9 or 11; laboratory or practicum, Th. or F., 1 to 4.
3. **Plant Propagation.** Third term. The theory and practice of multiplying plants by seeds, layers, cuttings, grafts and divisions; pruning and training, including both the theory and practice of the operations involved; spraying, history of the development and use of insecticides and fungicides, together with a study of the comparative merits of different remedies for particular insects and plant diseases. Four and one-half hours credit. Lectures and recitations, M., Tu., W., 9 or 11; laboratory or practicum, Th. or F., 1 to 4.
5. **Varieties of Cultivated Fruit.** First term. A study of history, characteristics, adaptation and general qualities of orchard and garden fruits, including their commercial and food values. The judging and scoring of apples, pears, peaches, grapes, citrous and nut fruits. Four and one-half hours credit. Lectures and recitations, M., W., F., at 8; laboratory and practicum, W., 1 to 4.
6. **Principles of Fruit Culture.** Second term. A study of the location, tillage and fertilizing of orchards and gardens; the selection of varieties, laying out, planting and general management of fruit plantations, including diseases, insects and fungi; the use of insecticides and fungicides; harvesting, marketing and storing fruit. Four and one-half hours credit. Lectures and recitations, M., Tu., Th., at 10; laboratory and practicum, W., 1 to 4.
14. **Olericulture.** Third term. Principles of home and truck gardening, including a study of the cultural, soil, climatic and market conditions to be considered in relation to the various garden crops. Four and one-half hours credit. Lectures and recitations, M., Tu., Th., at 10; laboratory or practicum, W., 1 to 4.
8. **Elements of Floriculture.** First term. A study of the history, classification, general characteristics, propagation and culture of ornamental plants, together with their uses for home and public grounds. Two and one-half hours credit. Lectures and recitations, Tu., at 8 or F., at 9; laboratory or practicum, M. or Tu., 1 to 4.
9. **Window Gardening.** Second term. Including the general management of house plants, the home conservatory, and the uses of flowers and plants for indoor decoration. Two and one-half hours credit. Lectures and recitations, Tu., at 8 or F., at 9; laboratory or practicum, M. or Tu., 1 to 4.

10. **Home Gardening.** Third term. The location, arrangement, planting and management of the kitchen garden, and the laying out and treatment of the ornamental grounds about the home. Two and one-half hours credit. Lectures and recitations, Tu., at 8 or F., at 9; laboratory or practicum, M. or Tu., 1 to 4.
13. **Landscape Gardening.** Third term. A study of the art of producing picture-like or landscape effect; the making of lawns, walks and drives, and the correct planting of trees, shrubs and flowers for the external adornment of home and public grounds. Two and one-half hours credit. Lectures and recitations, Th., at 8; practicum, F., 1 to 4.
11. **Elements of Forestry.** First term. Our native and introduced trees and shrubs treated individually and collectively; their use for timber, fuel, shelter, ornament, etc. Methods of propagation and culture. Five hours credit. Lectures and recitations, M., W., at 8; laboratory or practicum, M., F., 1 to 4.
12. **Forest Technology and Timber Physics.** Second term. The principles and methods of establishing, improving and managing woodlands; including the measurements and estimates of standing timber and harvesting of forest products; a study of the more important physical properties of wood. Five hours credit. Lectures and recitations, M., W., at 8; laboratory or practicum, M., F., 1 to 4.
15. **Forest Economics.** Third term. The economic features of modern forestry; the influence of forests upon climate, soils and crop production; forest valuation, protection and administration; forest laws and forest policies; forestry conditions in Ohio and other states. Five hours credit. Lectures and recitations, M., W., at 8; laboratory or practicum, M., F., 1 to 4.
16. **Nature Study.** First term. A course intended primarily for those who are or expect to become teachers; treating of the objects and aims of nature study with lectures on some of the interesting things to be found everywhere about us, indicating how such material can be advantageously used by the teacher in class room work. Two and one-half hours credit. Lectures, recitations and practicum, M., W., 1 to 4.
17. **Plant Variation.** Second term. A course designed for those interested in plant breeding and in the modification and improvement of plants by mutation, crossing, dwarfing, forcing, etc., together with a discussion of the current theories of evolution as applied to the variation and amelioration of plants under cultivation. Two and one-half hours credit. Lectures and recitations, W. at 8; seminar or a laboratory period, Th., 1 to 4.

INDUSTRIAL ARTS AND SHOPWORK

Hayes Hall, Rooms 5, 6, 9, 12, 17 and 18.

PROFESSOR SANBORN, ASSISTANT PROFESSOR KNIGHT, MR. RENCK, MR. CROWE,

Industrial Arts.

1. **Tools and Machines.** Lectures and recitations on hand and machine tools and the principles underlying their construction and operation, and materials used in construction. Three hours credit. (Courses in Industrial Arts and Manual Training, third year; Short Course in Industrial Arts, second year, first, second and third terms, Tu., Th., S., 8.) Professor Sanborn.
2. **Designing.** Problems in design, to accompany Course 1. Three hours credit. (Courses in Industrial Arts and Manual Training, third year; Short Course in Industrial Arts, second year, second and third terms, F., 1-4; S., 9-12.) Professor Sanborn.

3. **Shop Equipment, Appliances and Management.** A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction; shop and factory building and their construction; power, power transmission and prime movers; automatic machines and other special devices for turning out cheap and accurate work; methods of compensation and shop accounts and management. Three hours credit. (Course in Industrial Arts, fourth year, first, second and third terms, M., W., F., 11.) Professor Sanborn.
4. **Advanced Designing.** Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacturing plants; to accompany Course 3. Three hours credit. (Course in Industrial Arts, fourth year, first and second terms. M., Tu., 1-4; third term, W., Th., 1-4.) Professor Sanborn.
5. **Workshop Appliances.** Lectures and problems on the construction of shop buildings and the arrangement of machinery; power required and the means of transmission; friction in line shafting and the efficiency of machinery; automatic machines and special shop appliances. Three hours credit. (Course in Mechanical Engineering, fourth year, third term, M., W., F., 8.) Professor Sanborn.
7. **Machine Design.** Practical application of the principles of machine design. Three hours credit. (Course in Electrical Engineering, third year, third term. M., Tu., 1-4.) Professor Sanborn.
8. **Machine Drawing.** Working sketches of mechanisms and machines from measurement; detail and assembly drawings of same. Three hours credit. (Short Course in Industrial Arts, second year, first term, W., Th., 1-4.) Professor Sanborn.

SHOPWORK

(Note.—For credit given, time schedule, courses required, etc., see table at end.)

1. **Carpentry and Pattern Making.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, framing and other work involving the use of ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary moulding to illustrate draft, parting, cores, etc. Mr. Renck.
2. **Forging.** Exercises and practice in iron and steel forging, including such operations as cutting, bending, drawing, upsetting, shaping and welding iron, the making, hardening and tempering of steel punches, drills and cold chisels. Mr. Crowe.
3. **Foundry Work.** Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass and pouring castings. Mr. Renck.
4. **Chipping and Filing.** Exercises and practice in vise work, including chipping in cast and wrought iron, surface filing, squaring, fitting, finishing, and the scraping of surface plates. Assistant Professor Knight.
7. **Carpentry and Pattern Making.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary molding to illustrate draft, parting, cores, etc. Mr. Renck.
8. **Carpentry: Cabinet Work.** Exercise and practice work in cabinet making, including paneling, mitre and dovetail joints, etc.; use of power tools. Mr. Renck.
9. **Advanced Pattern Making.** Continuation of pattern work of Shopwork 7. Mr. Renck.

11. **Forging.** The use and care of forge, fire and tools; practice in iron and steel forging, including such operations as cutting, bending, drawing, upsetting, shaping and welding iron; the making, hardening and tempering of steel punches, chisel and lathe tools. Mr. Crowe.
12. **Advanced Forging.** Various forms of welds in iron and steel; the use of scrolling irons and of forms for duplicating work; annealing; tool making; case-hardening; tempering drills, dies and cutters; spring making; ornamental iron work; visits to shops. Mr. Crowe.
13. **Machine Work.** Exercises and practice in hand-turning in iron and brass on speed lathes; in straight and taper turning, boring, fitting, chucking, and thread-cutting on engine lathes. Assistant Professor Knight.
14. **Machine Work.** Exercises and practice on the lathe, planer, shaper, drill press and milling machine, with use of small tools as drills, taps, dies, reamers, counterborers, etc.; construction of parts of actual machines. Assistant Professor Knight.
15. **Advanced Machine Work.** Exercises and practice on turret lathe, universal, surface and tool grinding machines; in gear cutting, etc. Assistant Professor Knight.
16. **Advanced Machine Work.** The construction and use of jigs and templates; the accurate laying out of work; the duplication of parts, the production of work rapidly and economically, etc. Assistant Professor Knight.
17. **Advanced Machine Work.** The making and use of special tools and fixtures, standard plugs and collars, standard caliper and limit gauges; error limits in modern machine construction; methods of testing the accuracy of machine tools, etc. Assistant Professor Knight.

Summer Term. The Summer Term in Shopwork will begin on Monday morning preceding Commencement Day and continue for four weeks. The courses open to students are Shopwork (4) (7) (11) (13) (14) and (15), three hours credit in each.

Each course requires three hours a day for six days a week. Students electing the Electrical or Mechanical Engineering Courses are required to take two of the three courses, Shopwork (4) (7) and (11) at the close of their first year.

Students electing the Chemical Engineering Course are required to take Shopwork courses (7) and (11) at the close of their first or second year.

The courses are open as elective to students who desire to lighten their work of the regular terms, to make up back work or to take extra work.

SHOPWORK REQUIRED

Number	Credit hours	Subject	Year	Term	Hours	Courses in
1	3	Woodworking	1	3	M. Tu. 1-4; W. Th. 1-4; or F. 1-4; S. 8-11.	Agric.; Hort. and For.
2	3	Forging	1	3	M. Tu. 1-4; or W. Th. 1-4	Short Agric.
2	3	Forging	2	2	M. Tu. 1-4; W. Th. 1-4; or F. 1-4; S. 8-11.	Agric.
2	2	Founding	2	1	Th. 1-5; or S. 8-12.....	Mech. Eng.
2	2	Founding	2	1	Tu. 1-5.....	Short Ind. Arts.
3	3	Founding	2	1	M. 2-4; Tu. 1-5.....	Ind. Arts; Manual Train.
4	2	Chipping & Filing	1	3	M. Tu. 1-3.....	Short Clayworking.

SHOPWORK REQUIRED—Concluded

Number	Credit hours	Subject	Year	Term	Hours	Courses in
4	3	Chipping & Filing	2	1	F. 1-4; S. 9-12.....	Short Ind. Arts.
4	3	Chipping & Filing	2	1	(See Courses).....	Elec. Eng.; Mech. Eng.
4	3	Chipping & Filing	2	1	M. Tu. 1-4.....	Ceramics.
4	3	Chipping & Filing	2	1	M. Tu. 1-4.....	Ind. Arts.
4	3	Chipping & Filing	2	1	M. Tu. Th. 10-12.....	Manual Train.
7	2	Woodworking	2	1	M. F. 10-12.....	Mining Eng.
7	2	Woodworking	2	1	M. Tu. 1-4.....	Short Ind. Arts.
7	2	Woodworking	2	1	W. Th. 1-4.....	Manual Train.
7	2	Woodworking	2	1	F. 1-4; S. 8-11.....	Ind. Arts.
7	2	Woodworking	2	1	(See Course).....	Chem., Elec. and Mech. E.
8	3	Cabinet work.....	2	3	M. Tu. 1-4.....	Ind. Arts; Manual Train.
9	3	Adv. Pattern work	1	2	M. Tu. 1-4.....	Short Ind. Arts.
9	3	Adv. Pattern work	2	2	M. Tu. 1-4.....	Ind. Arts; Manual Train.
9	3	Adv. Pattern work	2	2	(See Courses).....	Mech. Eng.
11	3	Forging	2	2	(See Courses).....	Chem., Elec. and Mech. E.
11	3	Forging	2	2	M. F. 10-12.....	Mining Eng.
11	3	Forging	2	2	F. 1-4; S. 8-11.....	Ind. Arts; Manual Train.
11	3	Forging	1	3	M. Tu. Th. 10-12.....	Short Ind. Arts.
11	3	Forging	1	3	M. Tu. 1-4.....	Short Mining.
11	3	Forging	1	3	W. Th. 1-4.....	Short Clayworking.
11	3	Forging	3	3	W. Th. 1-4.....	Ceramics.
12	3	Adv. Forging.....	2	3	F. 1-4; S. 8-11.....	Ind. Arts; Manual Train.
13	3	Machine work.....	2	2	M. Tu. 1-4; or W. Th. 1-4; or F. 1-4, S. 8-11.	Elec. Eng.
13	3	Machine work.....	3	2	M. Tu. 1-4.....	Manual Train.
13	3	Machine work.....	3	2	M. Tu. Th. 10-12.....	Ind. Arts.
13	3	Machine work.....	2	2	W. Th. 1-4.....	Short Ind. Arts.
13	3	Machine work.....	2	3	M. Tu. 1-4; or F. 1-4, S. 8-11.....	Mech. Eng.
14	3	Adv. Machine w'k	3	1	M. Tu. W. 8-10; or Th. F. S. 8-10.....	Elec. Eng.
14	3	Adv. Machine w'k	3	1	M. Tu. Th. 10-12; or M. Tu. 1-4.....	Mech. Eng.
14	3	Adv. Machine w'k	2	3	Th. F. 1-4.....	Short Ind. Arts.
14	3	Adv. Machine w'k	3	3	M. Tu. Th. 10-12.....	Manual Train.
14	3	Adv. Machine w'k	3	3	M. Tu. 1-4.....	Ind. Arts.
15	3	Adv. Machine w'k	4	1	F. 1-4; S. 8-11.....	Ind. Arts; Manual Train.
15	4	Adv. Machine w'k	3	2	M. Tu. Th. F. 10-12; or Th. 2-4; F. 1-4; S. 9-12.....	Mech. Eng.
16	3	Adv. Machine w'k	4	2	M. W. F. 8-10.....	Ind. Arts; Manual Train.
17	3	Adv. Machine w'k	4	3	M. Tu. 1-4.....	Ind. Arts.

LATIN LANGUAGE AND LITERATURE

University Hall, Rooms 17, 28, 29, 37, 54 and 55

PROFESSOR DERBY, ASSOCIATE PROFESSOR HODGMAN, ASSOCIATE PROFESSOR ELDEN.

At least five units of preparatory Latin are required for admission to this department. Starred courses are not given in 1903-1904. Courses 1, 2 and 3 must precede all elective work in Latin, and courses 4, 5 and 6 must precede or accompany other elective courses in this department.

1. **Cicero:** De Senectute and De Amicitia, or Selected Letters. Four hours credit. First term. Sec. I: M., Tu., Th., F., at 10; Associate Professor

Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2. Associate Professor Hodgman.

2. **Livy:** Book 1, 2, 21, or 22. Four hours credit. Second term. Sec. I: M., Tu., Th., F., at 10; Associate Professor Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2; Associate Professor Hodgman.
3. **Horace:** Odes. Four hours credit. Third term. Sec. I: M., Tu., Th., F., at 10; Associate Professor Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2; Associate Professor Hodgman.
4. **Pliny:** Selected Letters. Three hours credit. First term. Sec. I: Tu., Th., F., at 2; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.
5. **Tacitus:** Germania and Agricola or Catullus. Three hours credit. Second term. Sec. I: Tu., Th., F., at 2; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.

6. **Terence:** Phormio; Plautus, Trinummus or Captivi. Three hours credit a week. Third term. Sec. I: Tu., Th., F., at 2; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.

The instruction in courses 4, 5 and 6, without neglecting the lines of the preceding work, pays more attention to the style and literary merit of the authors studied, and to the subject-matter as a contemporary record of Roman thought and life.

- *7. **Tacitus:** *Historiæ* or *Annales*. Three hours credit. First term.
- *8. **Juvenal:** *Satires*. Three hours credit. Second term.
- *8. **Martia I:** Selected Epigrams. Three hours credit. Third term.
- *10. **Plautus:** *Menaechmi* and *Rudens*. Three hours credit. First term. Tu., Th., F., at 10. Associate Professor Hodgman.
- *11. **Cicero:** *De Finibus* or *De Officiis*. Three hours credit. Second term. Tu., Th., F., at 10. Associate Professor Hodgman.
- *12. **Seneca.** *Medea*, *De Vita Beata*, *De Providentia*, *De Tranquillitate Animi*. Three hours credit. Third term. Tu., Th., F., at 10. Associate Professor Hodgman.
13. **Cicero:** *De Natura Deorum*. Three hours credit. First term. M., W., F., at 9. Associate Professor Elden.
14. **Lucretius:** *De Rerum Natura*. Three hours credit. Second term. M., W., F., at 9. Associate Professor Elden.
15. **Horace:** *Satires*. Three hours credit. Third term. M., W., F., at 9. Associate Professor Elden.
- *16. **Horace:** *Epistles*. Three hours credit. First term. M., W., F., at 3. Professor Derby.
- *17. **Suetonius:** *Divus Julius* and *Divus Augustus*, or Tacitus, *Annals*. Three hours credit. Second term. M., W., F., at 3. Professor Derby.
- *17a. **Late Latin.** Three hours credit. Third term. M., W., F., at 3. Professor Derby.
18. **Teachers' Course.** Three hours credit. M., W., at 8. Associate Professor Elden. This course is designed especially for students who intend

*Not given in 1903-1904.

to teach Latin and is open only to those who have completed courses 1-6 inclusive. First term: Cæsar; lectures, private reading, practical exercises in syntax, assigned topics in military antiquities. Second term: Cicero; lectures on Roman oratory and style, rapid reading of selected orations, assigned topics on Roman life and political antiquities. Third term: Vergil; lectures, studies in versification with especial reference to the diction and hexameter of Vergil, interpretation of selected portions of the text.

19. **Latin Prose Composition.** Two hours credit. Three terms. M., W., at 8. Professor Derby.
- *20. **Antiquities.** Two hours credit. Three terms. Tu., Th., at 8. Professor Derby. Roman private life will be studied during the first term; attention will be given to such topics as the family, education, dress, food, the house, trade and industries, books, travel, etc. The second and third terms will be devoted to political and legal antiquities, including finance and provincial administration.
- *21. **Latin Literature.** Two hours credit. First and second terms.
- *22. **Latin Philology.** Two hours credit. Third term.
23. **Historical Latin Grammar. Sounds and Inflections.** Two hours credit. Three terms. Tu., Th., at 10. Associate Professor Hodgman.
This course treats in lectures of the growth of Latin sounds and inflections. There will be collateral reading of inscriptions and from Quintilian.
- *24. **Advanced Latin Writing.** Two hours credit. Three terms.
25. **Pro-Seminary.** Three hours credit. M., W., at 2. Professor Derby. Principles of textual criticism and methods of independent research. The work of 1903-4 will consist of the textual and exegetical study of a portion of the *Jugurtha* of Sallust, combined with the more rapid reading of other portions of the author, and will be supplemented by lectures upon the history and development of Roman History. Special topics will be assigned to the student for investigation and report. This course should be preceded or accompanied by course 18. The ability to use German text-books will be required of students in this course after the year 1903-4.
26. **Pharmaceutical Latin.** Four hours credit. Three terms.
27. **Ovid: Fasti.** A large amount will be read of Ovid's poetical calendar, with its account of the social and religious observances connected with the Roman holidays. One hour credit. Three terms. F., at 10. Associate Professor Hodgman.
28. **Historical Latin Grammar. Syntax,** lectures on problems connected with the origin and development of certain constructions in Latin Syntax; a treatment along historical lines of the syntactic uses of the cases, moods and tenses. One hour credit. Three terms. F., at 3. Associate Professor Elden.

LAW.

Page Hall.

PROFESSORS HUNTER, COLLINS, KINKEAD, KNIGHT, PAGE, RANDALL AND SHAUCK, MR. RIGHTMIRE.

Elementary Law. Fifteen hours credit. First Semester. First year. (*Robinson, Walker, Tenth Edition, and Blackstone and Tiffany's Persons and Domestic Relations.*) Mr. Page, Mr. Rightmire.

*Not given in 1903-1904.

- Agency. Two hours credit. Second Semester. First year. (*Mechem.*) Mr. Randall.
- Contracts. Four hours credit. Second Semester. First year. (*Bishop.*) Mr. Page.
- Criminal Law. Three hours credit. Second Semester. First year. (*Hawley.*) Mr. Kinkoad.
- Sales. Two hours credit. Second Semester. First year. (*Tiedeman.*) Mr. Rightmire.
- Torts. Four hours credit. Second Semester. First year. (*Cooley.*) Mr. Kinkoad.
- Bailments. Two hours credit. First Semester. Second year. (*Hale.*)
- Negotiable Instruments. Five hours credit. First Semester. Second year. (*Tiedeman, Randall.*) Mr. Randall.
- Evidence. Three hours credit. Throughout the year. Second year. (*Greenleaf, Sixteenth edition.*) Judge Hunter.
- Pleading. Four hours credit. Throughout the year. Second year. (*Phillips.*) Mr. Kinkoad.
- Moot Court. One hour credit. Throughout the second and third years. Judge Hunter.
- Partnership. Two hours credit. Second Semester. Second year. (*Mechem.*) Mr. Randall.
- Real Property. Five hours credit. Second Semester. Second year. (*Tiedeman.*) Mr. Page.
- Wills. Two hours credit. Second Semester. Second year. (*Page.*) Mr. Page.
- Constitutional Law. Three hours credit. First Semester. Third year. (*Black.*) Mr. Knight.
- Private Corporations. Two hours credit. Throughout the year. Third year. (*Taylor.*) Judge Hunter.
- Municipal Corporations. Three hours credit. First Semester. Third year. (*Elliott.*) Judge Hunter.
- Equity. Four hours credit. First Semester. Third year. (*Merwin.*) Judge Shauck.
- Probate Law. Two hours credit. First Semester. Third year. (*Kinkoad.*) Mr. Kinkoad.
- Ethics. Two hours credit. Second Semester. Third year. (*Sharswood.*) Mr. Kinkoad.
- Federal Practice. Two hours credit. Second Semester. Third year. Judge Collins.
- Quasi-Contracts. Two hours credit. Second Semester. Third year. (*Keener.*) Mr. Page.
- Suretyship. Two hours credit. Second Semester. Third year. (*Stearns.*) Judge Hunter.
- Trial Practice. Two hours credit. Second Semester. Third year. (*Kinkoad.*) Mr. Kinkoad.

GRADUATE WORK

General and Comparative Jurisprudence.

General Jurisprudence.. Holland and Particular Topics. One hour credit, second semester. President Thompson.

Comparative Jurisprudence. Roman Law; Outlines. Two hours credit, first semester.

History of the Common Law, Pollock & Maitland. Three hours credit, first semester. Mr. Page.

English and American Constitutional History.

English Constitutional History. Three hours credit throughout the year.

American Constitutional History. Three hours credit throughout the year. Mr. Knight.

Political Science.

Public International Law.

History of Treaties and Modern Diplomacy. Five and six, two hours credit throughout the year.

American Diplomatic History. This is included in American Constitutional History, but may be taken separately. Three hours credit throughout the year. Mr. Knight.

American Jurisprudence.

Private Corporations—Cases. Two hours credit, first semester. Judge Hunter.

Railroad Law. One hour credit, second semester.

Law of Receivers. One hour credit, second semester.

Insurance. One hour credit, first semester.

Negligence and Damages.. Cases, and Jones on Negligence of Municipal Corporations. One hour credit throughout the year. Judge Hunter.

Cases in Evidence. Thayer. One hour credit throughout the year. Judge Hunter.

Cases in Equity. Two hours credit, second semester. Judge Shauck.

Remedies and Remedial Rights, including drafting, pleadings and other legal papers; preparation for trial; and Moot Court. One hour credit throughout the year. Mr. Kinkaid.

Real Property, advanced studies, including examinations of titles and making of abstracts of title. One hour credit, second semester. Mr. Page.

Circuit and Supreme Court Practice, and Special Proceedings under the Ohio Code of Civil Procedure. One hour credit, second semester. Judge Shauck.

Private International Law (Conflict of Laws). One hour credit throughout the year. Mr. Knight.

MATHEMATICS

Office, University Hall, Room 45

PROFESSOR BOHANNON, ASSOCIATE PROFESSOR MCCOARD, ASSOCIATE PROFESSOR BOYD,

*ASSISTANT PROFESSOR ARNOLD, ASSISTANT PROFESSOR SWARTZEL, ASSISTANT

PROFESSOR KUHN, ASSISTANT PROFESSOR CODDINGTON, MR.

RAZOR, MR. SKIMMING.

1. **Elementary Algebra.** Venable. Five hours credit. (Short Course in Clay-working, first year, first term, M., Tu., W., Th., F., 9.) Mr. Skimming.
2. **Elementary Algebra.** Wentworth. Five hours credit. (Short Courses in Mining and Industrial Arts, first year, first, second, third terms, M., Tu., W., Th., F., 9.) Professor Ray.
3. **Plane Geometry.** Venable. Five hours credit. (Short Courses in Mining and Industrial Arts, first year, first term, M. Tu. W. Th. F. 11.) Mr. Razor.
- 3a. **Plane Geometry.** Venable. Five hours credit. (Short Course in Clay-working, first year, second term, M., Tu., W., Th., F., 9.) Mr. Razor.
11. **Differential Equations.** Edwards. One hour credit. (Course in Mechanical Engineering, third year, first term, F., 10.) Assistant Professor Boyd.
13. **Solid Geometry.** Venable. Five hours credit. (Short Courses in Mining and Industrial Arts, first year, second term, M., Tu., W., Th., F., 11.) Mr. Razor.
14. **Trigonometry.** Plane trigonometry. Taylor and Puryear. Five hours credit. (Short Courses in Industrial Arts and Mining, first year, third term, M., Tu., W., Th., F., 8.) Mr. Skimming.
21. **College Algebra.** Taylor's College Algebra. Three hours credit, first term. Open to students having credit for the second unit of entrance algebra. (Students not able to present this second unit on entrance may make it up in college, but without college credit. Each term a class will be organized for this purpose.) Course 21 is given on M., W., F., at 9, 11 and 1. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Kuhn, Mr. Razor, Mr. Skimming.
22. **Plane Trigonometry.** Three hours credit, second term. Open to students having credit for the first unit of entrance algebra and the first unit of entrance geometry. M., W., F., at 9, 11, and 1. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Kuhn, Mr. Razor, Mr. Skimming.
23. **Elementary Course in Analytical Geometry and Calculus.** Three hours credit, third term. Open to students having credit for entrance algebra and geometry and for course 22. (Students not prepared in the second unit of entrance geometry may make up the deficiency in a special class during the second term, but without college credit. See also note to course 21.) M., W., F., at 9, 11, 1. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Coddington, Kuhn, Mr. Razor, Mr. Skimming.
24. **Problems on all past Work.** One hour credit through the year. Peterson's Problems in Geometry, with selected problems in algebra, trigonometry, analytical geometry and calculus. This course may accompany courses 21, 22, 23, or courses 31, 32, 33. F., at 10. Professor Bohannon, Assistant Professor Kuhn.

* Absent on leave.

28. **Analytical Geometry and Calculus.** Three hours credit through the year. Open to students having credit for courses 21, 22, 23, or courses 31, 32, 33. Hours to be arranged. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Kuhn, Mr. Rasor.
31. **College Algebra.** Five hours credit, first term. Taylor's College Algebra. Open to students having credit for entrance algebra. Twelve sections meeting daily at 8, 9, 11, 1 and 2. Professor Bohannon, Associate Professor McCoard, Assistant Professors, Arnold, Coddington, Kuhn, Mr. Rasor.
32. **Plane Trigonometry.** Five hours credit, second term. Open on a credit for entrance algebra and for the first unit of entrance geometry. Twelve sections meeting daily at 8, 9, 11, 1 and 2. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Coddington, Kuhn, Mr. Rasor.
33. **Analytical Geometry.** Five hours credit, third term. Open on a credit for entrance algebra, the first unit of entrance geometry and for course 12 or 23. Twelve sections meeting daily at 8, 9, 11, 1 and 2. Professor Bohannon, Associate Professor McCoard, Assistant Professors Arnold, Coddington, Kuhn, Mr. Rasor.
41. **Calculus.** Five hours credit, first term. Open on a credit for courses 21, 22, 23, or for courses 31, 32, 33. Five sections meeting at 8, 11 and 1. Professor Bohannon, Associate Professors McCoard and Boyd, Assistant Professors Arnold, Coddington, Kuhn.
42. **Continuation of course 41.** Second term. Five hours credit. 8, 11, 1.
43. **Continuation of course 42.** Third term. Five hours credit. 8, 11, 1.
71. **Mechanics.** Five hours credit. First term. Open on credit for courses 41, 42, 43. Daily at 8, 9, 11. Associate Professor Boyd, Assistant Professor Kuhn.
72. **Continuation of course 71.** Five hours credit. Second term. Daily at 8, 9, 11.
73. **Continuation of course 72.** Five hours credit. Third term. Daily at 8, 9, 11.
25. **Higher Mathematics.** From one to ten hours a week may be selected from the following courses:
 - (a) Determinants.
 - (b) Modern Geometry. (Assistant Professor Kuhn.)
 - (c) Modern Higher Algebra.
 - (d) Advanced Plane Analytical Geometry.
 - (e) Advanced Calculus.
 - (f) Space Analytics.
 - (g) Differential Equations.
 - (h) Theory of Equations. (Assistant Professor Coddington.)
 - (i) Higher Plane Curves.
 - (j) Groups.
 - (k) General Function Theory.
 - (l) Elliptic Functions.
 - (m) Potential Function. (Assistant Professor Swartzel.)
 - (n) Spherical Harmonics.
 - (o) Mathematical Electricity.
 - (p) Mathematical Optics.
 - (q) General Mathematical Physics.
 - (r) Higher Geodesy.
 - (s) Infinite Series and Products. (Assistant Professor Swartzel.)
 - (t) The Teaching of Elementary Mathematics. A course in methods of teaching elementary mathematics, designed especially for those preparing to teach in the secondary schools. The laboratory plan will be

carefully considered. Twice a week, third term. Tu., Th., at 2. Assistant Professor Kuhn.

Course 25 (b) meets on Tu., Th., at 10. Three terms. Hours for all other courses to be arranged with the instructors. Professor Bohannon, Assistant Professor Swartzel, Assistant Professor Kuhn, Assistant Professor Coddington.

MECHANICAL ENGINEERING

Office, Hayes Hall, Room 11

PROFESSOR MAGRUDER, PROFESSOR HITCHCOCK, ASSISTANT PROFESSOR JUDD, MR.

BAILEY, MR. YOST.

3. **Mechanism.** Lectures and recitations on the principles of mechanism and mechanical movements. Five hours credit. (Courses in Electrical and Mechanical Engineering, third year, second term, M., Tu., W., Th., F., 8; or M., Tu., Th., F., 10, S., 8.) Professor Hitchcock.
The accurate laying out of movements, embodying the principles of mechanism. Two hours credit. (Course in Mechanical Engineering, third term, M. Tu. 1-3.) Professor Hitchcock.
12. **Experimental Engineering Laboratory.** Calibration of pressure gauges and indicator springs; steam engine indicator practice and oil testing. Two hours credit. (Course in Mechanical Engineering, third year, first term, M. or W. 1-5. Course in Industrial Arts, fourth year, first term, Th., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
14. Continuation of Course 27. Four hours credit. (Course in Mechanical Engineering, fourth year, second term, M., Tu., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
15. Continuation of Course 14. Testing of steam boilers, injectors, steam, centrifugal and power pumps, pulsometer and hydraulic rams. Three hours credit. (Course in Mechanical Engineering, fourth year, third term, M., Tu., 9-12; or Th., F., 9-12.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
17. **Experimental Engineering.** Practice in the testing of materials of construction, calibration of orifices and weirs, study of the flow of liquids and gases, accompanied by lectures and recitations on laboratory practice, steam engines, boilers and power transmission. Three hours credit. (Course in Civil Engineering, fourth year, second term, Th., 11, F., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
18. **Machine Design.** Recitations on Unwin's Machine Design, with lectures on American practice. Five hours credit. (Course in Chemical Engineering, fourth year, first term, M., Tu., W., Th., F., 11. Course in Mechanical Engineering, fourth year, first term, M., Tu., W., Th., F., 9. Courses in Chemical and Mechanical Engineering, fourth year, second term, M., Tu., W., Th., F., 11.) Professor Magruder.
19. **Machine Design.** Practical applications of the principles of machine design. Five hours credit. (Courses in Chemical and Mechanical Engineering, fourth year, third term, M., 1-5, Tu., W., 1-4.) Professor Magruder.
21. **Thesis Work.** Five hours credit. (Course in Mechanical Engineering, fourth year, third term.) Professor Magruder and Professor Hitchcock.
22. **Timber and Masonry.** Lectures on the construction of foundations and structures in timber and masonry. Three hours credit. (Courses in Industrial Arts and Mechanical Engineering, third year, last three-fifths of second term, M., Tu., W., Th., F., 9.) Professor Magruder.

23. **Materials of Construction.** Lectures on the materials used in architectural and building construction, and laboratory exercises on their properties. Four hours credit. (Course in Architecture, fourth year, first term, M., Tu., 10, F., 1-5.) Professor Hitchcock.
24. **Experimental Engineering Laboratory.** Arranged to meet the needs of those desiring to elect advanced laboratory work. Three hours credit. (First and second terms. Elective to third and fourth year engineers.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
25. Continuation of Course 17. Tests of steam, power, rotary and centrifugal pumps; water motor and turbine wheel. Five hours credit. (Course in Civil Engineering, fourth year, third term, W., 9, M., Tu., 2-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
27. Continuation of Course 12. Testing materials of construction, steam engine, hot air engine and compressor tests, transmission and absorption dynamometer trials and testing of belts. Five hours credit. (Course in Mechanical Engineering, fourth year, first term, W., Th., 11, 1-5; or M., F., 11, 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
28. **Experimental Engineering Laboratory.** Testing materials of construction, transmission and absorption dynamometer tests, testing of lubricating oils. Two hours credit. (Course in Electrical Engineering, third year, third term, Th., or F., 1-5. Course in Manual Training, fourth year, third terms, F., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
29. Continuation of Course 28. Testing of pressure gauges and indicator springs, steam engine indicator practice and steam engine trials. Three hours credit. (Course in Electrical Engineering, fourth year, first term, Tu. or Th., 10-12, 1-5.) Two hours credit. (Course in Industrial Arts, fourth year, second term, W., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
30. Continuation of Course 29. Steam engine and boiler trials, steam and power pump tests and hydraulic experimentation. Two hours credit. (Course in Electrical Engineering, fourth year, second term, Th., 10-12, 1-5. Course in Industrial Arts, fourth year, third term, F., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
31. **Hydraulic Machinery.** Recitations and lectures on pumping machinery. Three hours credit. (Course in Mechanical Engineering, fourth year, third term, Tu., Th., 8, W., 9.) Professor Hitchcock.
32. **Mechanical Engineering of Power Plants.** A descriptive study of steam and gas engines, boilers, pumps, injectors and other machinery used in plants generating power. Five hours credit. (Courses in Chemical and Electrical Engineering, and Industrial Arts, third year, third term, M., Tu., W., Th., F., 9. Course in Mechanical Engineering, third year, third term, M., Tu., W., Th., F., 11. Course in Manual Training, fourth year, third term, M., Tu., W., Th., F., 9.) Professor Magruder.
33. **Steam Engines and Boilers.** A detail study of steam using and steam generating machinery. Five hours credit. (Courses in Electrical and Mechanical Engineering, fourth year, first term, M., Tu., W., Th., F., 8.) Professor Magruder.
34. **Thermodynamics.** Lectures and recitations on the transmutations of heat and mechanical energies in steam, gas and air engines, and in air and ammonia compressors, together with a study of the tests of ideal and actual engines and of their indicator diagrams; the flow of gases through pipes and orifices. Five hours credit. (Course in Mechanical Engineering, fourth year, second term, M., Tu., W., Th., F., 8.) Professor Magruder.

35. **Experimental Engineering Laboratory.** Five hours credit. (Option, Course in Chemical Engineering, fourth year, second term, M., 9, M., Tu., 1-5.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.
36. **Experimental Engineering Laboratory.** Lectures and recitations on power transmission, steam engines and boilers. Laboratory; testing pressure gauges, indicator springs, etc.; valve setting; testing of steam engines, steam, power and centrifugal pumps; boiler and fuel trials. Five hours credit. (Courses in Ceramics and Mine Engineering, fourth year, third term, Tu., Th., 10-11, W., Th., 1-4.) Professor Hitchcock, Assistant Professor Judd and Mr. Bailey.

METALLURGY

Office, Chemical Hall, Room 5

PROFESSOR N. W. LORD, MR. SOMERMEIER, MR. SPITLER.

2. **Mineralogy.** Lectures arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three hours credit. (Courses in Chemical and Mining Engineering, second year, third term; Course in Ceramics, third year, third term, M., W., F., 11.) Professor N. W. Lord.
3. **Determinative Mineralogy.** Laboratory course in practical determination of minerals by physical and chemical tests. Each student is furnished with a set of apparatus, and works under an instructor's inspection. Brush and Penfield's Determinative Mineralogy is used as a manual. Five hours credit. (Course in Mining Engineering, third year, third term, M., Tu., W., 1-4.) Professor Lord, Mr. Somermeier, Mr. Spitler.
4. **Metallurgy.** A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the methods of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five hours credit. (Course in Mining Engineering, third year; option, Course in Chemical Engineering, fourth year, first and second terms, M., Tu., W., Th., F., 9. Courses in Industrial Arts and Mechanical Engineering, third year; Course in Ceramics, fourth year, first term, M., Tu., W., Th., F., 9.) Two hours credit. (Courses in Industrial Arts and Mechanical Engineering, third year, first two-fifths of the second term, M., Tu., W., Th., F., 9.) Professor Lord.
5. **Metallurgical Laboratory.** Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuel and slags, and the assay of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical works. Course 5 must be preceded by Chemistry 7. Five hours credit. (Course in Mining Engineering, second year, first, second and third terms; Course in Chemical Engineering, third year, first term, W., Th., F., 1-4.) Professor Lord, Mr. Somermeier, Mr. Spitler.
6. **Assaying.** Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Five hours credit. (Courses in Chemical and Mining Engineering, third year, second term, M., Tu., 11, 1-5.) Professor Lord, Mr. Somermeier, Mr. Spitler.
7. **Metallurgical Construction.** Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three hours credit. (Course in Mining Engineering, fourth year, second term, Th., F., 1-4.) Professor Lord, Professor Ray.
8. **Ore Dressing and Coal Washing.** Instruction in the methods of concentrating and enriching ores and fuels by mechanical means. Lectures, with reference to standard books and various papers in technical journals. Two hours credit. (Course in Mining Engineering, fourth year, first term, Tu., F., 10.) Professor Lord.

9. **Mineral Chemistry.** Lectures upon fire-damp, mine explosions, explosives, boiler waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five hours credit. (Short Course in Mining, second year, third term, M., Tu., W., Th., F., 8.) Professor Lord.

MILITARY SCIENCE AND TACTICS

The Armory

Captain George L. Converse, U. S. A. (Retired.)

The Military Department is open five days during each week of each term.

1. **Military Drill.** Four times a week from the opening of college till the Thanksgiving vacation; four times a week from Thanksgiving till April first; four times a week till the close of the school year. Required of all able-bodied male students during first and second years of their course.
2. **Tactics.** Lectures and recitations. Once a week. Second term.
3. **Art of War.** Lectures and recitations. Once a week. Second term.

MINE ENGINEERING

Office, Chemical Hall, Room 29

PROFESSOR RAY.

1. **Mine Surveying.** Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing room. Five hours credit. (Short Course in Mining, second year, first term, M., Tu., W., Th., F., 11.) Professor Ray.
2. **Ventilation and Haulage.** Lectures illustrated by experiments and maps of mines and models when possible, tests by safety lamps and anemometers, and methods of air distribution in coal mines. Five hours credit. (Short Course in Mining, second year, second term, M. Tu. W. Th., F., 11.) Professor Ray.
3. **Mine Operating.** A course of lectures and practical instruction in mine book-keeping and accounts, cost of working, etc., particularly adapted to Ohio coal mining. Five hours credit. (Short Course in Mining, second year, third term, Tu., Th., F., 10, M., 9-11.) Professor Ray.
4. **Mine Surveying.** Field practice in the use of instruments for surface and underground surveys. Full notes are taken and maps and plans made in the drawing room. Davies' Surveying by Van Amringe is used as a text-book. Five hours credit. (Courses in Mining Engineering and Ceramics, third year, first term, M., Tu., Th., F., 10, M., 1-3.) Professor Ray.
5. **Mine Engineering.** Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five hours credit. (Course in Mining Engineering, fourth year, first, second and third terms, M., Tu., W., Th., F., 8.) Professor Ray.
6. **Plans and Specifications.** Five hours credit. (Course in Mining Engineering, fourth year, third term, M., Tu., W., Th., F., 8.) Professor Ray.
7. **Surveying.** Practical experience in surveying in some mine convenient to Columbus; the time taken in one trip of not more than four consecutive

days. One hour credit. (Course in Mining Engineering, third year, second term.) Professor Ray.

PHARMACY

Office, Room 13, Chemical Hall

PROFESSOR KAUFFMAN, ASSISTANT PROFESSOR DYE.

6. **Pharmacy.** General pharmaceutical processes. Lectures three times a week. First term. Three hours credit. Professor Kauffman. M., W., F., 9-10. Room 13, Chemical Hall.
7. **Pharmacy.** United States Pharmacopoeia official preparations. Lectures twice a week. Second term. Five hours credit. Professor Kauffman and Assistant Professor Dye. Lectures M. and W., 9-10. Laboratory for students in Short Course, Th., F., 1-4. Laboratory for students in Long Course, Th., 10-12; Sat. 8-12. Rooms 12 and 13, Chemical Hall.
8. **Dispensatories.** Official preparations. Lectures twice a week. Third term. Five hours credit. Professor Kauffman and Assistant Professor Dye. Lectures, M. and W., 9-10. Laboratory for students in Short Course, Th. and F., 1-4. Laboratory for students in Long Course, Th., 10-12; Sat., 8-12. Rooms 12 and 13, Chemical Hall.
10. **Extemporaneous Pharmacy.** Prescription practice. Lectures twice a week. Laboratory practice three times a week. Second term. Second year. Professor Kauffman and Assistant Professor Dye. Lectures, Tu. and Th., 11-12. Laboratory Tu. and W., 1-4. Rooms 12 and 13, Chemical Hall.
11. **General Practice.** Lectures twice a week. Dispensing and prescription practice. Third term. Five hours credit. Professor Kauffman and Assistant Professor Dye. Lectures, Tu. and Th., 11-12. Laboratory Tu. and W., 1-4. Rooms 12 and 13, Chemical Hall.
12. **Materia Medica.** Official drugs and classifications. Three times a week. First term. Three hours credit. Lectures M., W. and F., 11-12. Assistant Professor Dye. Room 13, Chemical Hall.
13. **Materia Medica.** Official and unofficial drugs. Three times a week. Second term. Three hours credit. Lectures and recitations. M., W. and F., 11-12. Assistant Professor Dye. Room 12, Chemical Hall.
14. **Materia Medica and Therapeutics.** Synthetic products. Poisons and Antidotes. Three hours credit. Third term. Lectures and recitations. M., W. and F., 11-12. Assistant Professor Dye. Room 12, Chemical Hall.
15. **Pharmaceutical Assaying.** Five hours credit. First term. Professor Kauffman. For time, consult professor in charge.
16. **Methods of Manufacture.** Five hours credit. Second term. Professor Kauffman. For time consult professor in charge.
17. **General Pharmacy.** Two lectures, three laboratory periods a week. Third term. Five hours credit. Professor Kauffman. For time, consult professor in charge.
18. **Pharmacognosy.** Lecture once a week. Two laboratory periods a week. Second term. Three hours credit. Associate Professor Dye. For time, consult professor in charge.
19. **Pharmacognosy.** Lectures and laboratory. Third term. Three hours credit. Continuation of Course 18.

PHILOSOPHY

University Hall, Rooms 33, 49, 50, 51

PROFESSOR SCOTT, ASSISTANT PROFESSOR HAINES, DR. DAVIES.

The courses in this Department offer a wide range of philosophical study. The work may be begun either (1), with course 18, to be followed by course 19 or 20; or (2) with course 19 to be followed by course 18; or (3), with course 22, to be followed by course 18 or 21.

UNDERGRADUATE COURSES

18. **General Psychology.** Three hours credit. First and second terms. Sec. I: M., W., F., at 11; Professor Scott. Sec. II: M., W., F., at 9; Assistant Professor Haines.
19. **Logic.** Three hours credit. Third term. Sec. I: M., W., F., at 11; Professor Scott. Sec. II: M., W., F., at 9; Assistant Professor Haines.
Students who take Rhetoric 3 during the same year should enter Section II, in which course 19 will precede course 18.
20. **Ethics.** Three hours credit. Third term. M., W., F., at 3. Professor Scott.
Those who take course 18 during the first two terms will have an option between courses 19 and 20 for the third term. The instruction in these courses is given by text-book, lectures and collateral reading.
21. **History of Modern Philosophy.** Three hours credit. Second and third terms. M., W., F., at 8. Dr. Davies.
22. **History of Ancient and Medieval Philosophy.** Three hours credit. First term. M., W., F., at 8. Dr. Davies.
These historical courses aim to present a comprehensive view of the field and to trace the historical development of philosophic thought during the modern period. One thesis will be required each term.
29. **Introduction to Experimental Psychology.** Three hours credit. Three terms. Tu., Th., 1 to 3. Lecture Th., at 1. Assistant Professor Haines.

This is a practice course intended to familiarize the student with the experimental method in psychology and at the same time bring him in touch with some of the more important results of recent psychological investigation. It is the natural preparation for the research work offered in course 30. But it offers a distinct service to those who do not intend to do further work in experimental psychology. It brings one to a first hand acquaintance with the standpoint of psychology as an empirical science; and constitutes a valuable course of training in introspection. The course must be preceded or accompanied by Philosophy 18 or Zoology 21. Titchener's Experimental Psychology will be used as a laboratory guide.

UNDERGRADUATE AND GRADUATE COURSES

Most of the following courses are designed primarily for graduate students. But many of them may be pursued with profit by undergraduates who have had as much as two years of preparation, and a few of them by those who have had but a single year of previous work. For example, courses 23, 24, 25 may immediately follow courses 18 and 19 or courses 18 and 20, and the historical courses may be pursued by those who have successfully completed courses 22 and 21.

23. **Conspectus of Philosophy.** Three hours credit. First term. M., W., F., at 2. Professor Scott.
24. **Theory of Knowledge.** Three hours credit. Second term. M., W., F., at 2. Professor Scott.
25. **Metaphysics.** Three hours credit. Third term. M., W., F., at 2. Professor Scott.

Course 23 proposes a logical survey of the whole field of philosophy, determining the content, boundaries, and relations of its several departments, and investigating as far as time permits the conceptions and problems of each. It, with courses 24 and 25, must be preceded by courses 18 and 19 or courses 18 and 20, and it is desirable that they should be preceded or accompanied by courses 22 and 21. Kupe's *Introduction to Philosophy* or a similar book will be used as a text, with collateral use of Paulsen, Ladd and Stuckenberg.

Courses 24 and 25 constitute a continuous study in fundamental philosophy, the former concerning itself primarily with the subjective, and the latter with the objective, aspects of the problems considered. In the former the main topics will be the nature and laws of thought, the categories and the relations of knowledge and belief, and of knowledge and reality. In the latter the special problem will be the nature of reality. Theses will be required during the year, not less than one for each term.

26. **Advanced Psychology.** Two hours credit. Three terms. Tu., Th., at 9. Dr. Davies.

This course is intended for students who may wish to carry their study of systematic Psychology beyond the limits of the elementary course 18. The purpose is to give the student facility in handling psychological questions in dependence upon the results of psychological inquiry. It will include during the first two terms an analytic and genetic treatment of selected topics; and in the third term the more important psychological theories will be presented and an attempt made to formulate a general theory of mental life. Sully's *The Human Mind* will be used as the basis of the study, but constant reference will be made to the works of James, Ladd, Wundt, Hoffding and other representative psychologists, as well as to current literature.

27. **Philosophy of Science.** Two hours credit. Three terms. Tu., Th., at 2. Professor Scott.

Course 27 has for its purpose to investigate the postulates and concepts of physical science. It will include such subjects as causality, mechanism and teleology, the existence and nature of matter and mind, the relation between them, and man's place in nature. Assigned readings, with reports and discussions, in Hume, Mill, Lotze, Spencer and others. One thesis will be required each term.

28. **Philosophy of Religion.** Two hours credit. Three terms. Tu., Th., at 2. Professor Scott.

This course includes a study of the nature of religion, the foundations of religious belief, the relations of philosophy to religion, and religious problems, such as the existence and nature of God, the problem of evil, and human immortality. Assigned readings, with reports and discussions in Spinoza, Kant, Fichte, Schleiermacher, Lotze, Pfleiderer, Martineau and others. One thesis will be required each term. Courses 27 and 28 are alternative. Which of them will be given in 1903-04 will be decided after consultation with the class.

30. **Research Work in Experimental Psychology.** Two hours credit. Three terms. Hours to be arranged. The psychological laboratory is open to students with suitable preparation to prosecute original investigations. The equipments in the laboratory and library, which are constantly increasing, make such work well worth the consideration of any student interested in the phenomena of mind. Philosophy 18 and 19 are required as preparation for this work. The arrangement of hours will be subject to the needs of the individual student. At least two hours must be taken. Assistant Professor Haines.

31. **Plato.** Two hours credit. Three terms. Tu., Th., at 3. Dr. Davies.

32. **Aristotle.** Two hours credit. Three terms. Tu., Th., at 3. Dr. Davies.

Only one of these two courses will be given each year, but it will be course 31 or 32, as the class may elect. The work will consist of readings from English translations of the author chosen and from

commentaries and criticisms such as those of Zeller, Grote, Nettleship, and Pater on Plato, and Grote, Lewes, Grant and Davidson on Aristotle. Lectures on special problems suggested by the author will be given.

33. **Descartes and Spinoza.** Three hours credit. First term. M., Th., F., at 10. Dr. Davies.
34. **Locke and Leibnitz.** Three hours credit. Second term. M., Th., F., at 10. Dr. Davies.
35. **Berkeley, Hume and Reid.** Three hours credit. Third term. M., Th., F., at 10. Dr. Davies.
36. **Kant, Fichte, Schelling and Hegel.** Three hours credit. Three terms. Not offered in 1902-1903.

Courses 33, 34 and 35 constitute one year's work, and will alternate with course 36. The first three are preparatory to the last and will be given in 1902-1903. Assigned portions of the leading works of the thinkers named will be studied and discussed, and an attempt will be made to obtain a clear conception of the author's system as a whole, and of his position on particular important problems of philosophy. One thesis will be required each term.

37. **Later German Philosophy.** Three hours credit. Three terms. M., Th., F., at 10. Assistant Professor Haines.
Following in historic order upon course 36, this course will deal with the German successors of Herbart and Hegel, and with Herman Lotze and Gustav Fechner. Greatest stress will be placed upon Lotze and his successors in Germany and America.

38. **Recent and Current Philosophy.** Three hours credit. Three terms. M., Th., F., at 10. Assistant Professor Haines.
This course will be primarily concerned with the neo-Hegelian movement and its recent exponents in America and England. It will resolve itself into a study for present day idealism as set forth by its leading representatives in these countries. Three hours throughout the year. Only one of these courses (37 and 38) will be given in 1903-1904. Which one shall be given will be decided on consultation with the class.

39. **Psychological Seminary.** Two hours credit. Three terms. Time to be arranged. Assistant Professor Haines.

A research course for advanced students. Subject for the year, the Will, or, more broadly, the conative life. The first manifestations and development of volition in children, a comparative study of will, the relations of instinctive and voluntary reactions, aboulia and impulsive insanities, and the manifestations of will in crowd phenomena, are topics which will sufficiently indicate the line of work. Lectures, readings, discussions and theses.

40. **Ethical Seminary.** Two hours credit. Three terms. Hours to be arranged. Professor Scott.

This course will be devoted in 1903-1904 to the historical and critical study of one or more of the great problems of ethics. The work will consist of assigned readings, papers and discussions.

41. **Philosophical Seminary.** Two hours credit. Three terms. Hours to be arranged. Dr. Davies.

This course will undertake a systematic study of the problem of knowledge. The consideration of the nature and conditions of formal truth will constitute the first part of the work, and Hobhouse's *Theory of Knowledge* will be read. This will be followed by a study of the psychology of knowledge, and by an examination of the nature, grounds, limits, and validity of our knowledge of reality. Ladd's *Philosophy of Knowledge* indicates the character of the discussion in the second part, and will be read in connection. The method of study combines lectures with papers and discussions by the class.

42. **Comparative Psychology.** Two hours credit. Three terms. Tu. and Th., at 8. Assistant Professor Haines.

Omitted in 1903-04. Alternates with 46.

Some attention is given to the development of mind in the individual development of the human being. But the main interest centers in the parallel series—the evolution of mind in the phylogenetic series. The various stages of mind development, judged by intelligent behavior, reflexive, instinctive and voluntary reactions; memory in animals, the so-called social instincts of bees and ants.

43. **Scientific Method.** Two hours credit. Tu. and Th., at 9. Assistant Professor Haines.

A study of the general methods of scientific procedure—the general methods by which science grows. It is not a study of the special methods of any individual science, though of course the illustrative material must be found in special fields. The more general features of all methods of science which have proved themselves efficient, are the subject matter of this course. Candidates for the work should have an intimate acquaintance with some one science.

44. **Advanced Ethics.** Two hours credit. Three terms. Tu., Th., at 3. Some of the subjects considered in philosophy 20 will receive a more thorough examination, and some of the leading theories of ethics will be studied. It is open only to students who have had courses 18 and 20. Professor Scott.

45. **Esthetics.** Two hours credit. Three terms. Hours to be arranged. This course will consider the subject of the beautiful from three points of view. 1, Historical: This will deal with the origin and development of art products in their dependence upon social and economic conditions; 2, Psychological: A consideration of the nature of the art impulse in its individual and social aspects; 3, Philosophical: A discussion of the relation that the Beautiful sustains toward the True and the Good with a view to the formulation of a theory of the beautiful as part of a philosophical system. Dr. Davies.

46. **Abnormal Psychology.** Two hours credit. Three terms. Tu., Th., at 8. Assistant Professor Haines.

A systematic study of the abnormal states of the human mind. The chief types of mental disease are passed in review, in order to obtain a definite picture of each, and also to obtain by the perspective thus afforded a clearer view of the normal mental processes. A psychological analysis of the various forms of insanity, for the student of psychology, education and medicine. Defendorf's Clinical Psychiatry will be used as text, supplemented by lectures; and the exceptional facilities which Columbus affords for such work will be utilized.

PHYSICAL EDUCATION

For Men

The Gymnasium and Armory

PROFESSOR LINHART, MR. HUDDLESON.

1. **Gymnasium.** Second term. Required of all young men during the first and second years of their course. M., Tu., W., Th., 4.

PHYSICAL EDUCATION

For Women

The Gymnasium and Armory

ASSOCIATE PROFESSOR BERRYMAN.

1. **Gymnasium.** Three terms. Required of all young women during the first year of their course. M., Tu., Th., F., at 9 and 11 o'clock.

2. **Gymnasium.** Three terms. Required of all young women during the second year of their course. M., Tu., Th., F., at 8 and 10 o'clock. The right is reserved to discontinue one section of 2 if an insufficient number apply for work.

PHYSICS

Office, University Hall, Room 13

PROFESSOR THOMAS, PROFESSOR COLE, ASSISTANT PROFESSOR KESTER, MR. TUCKERMAN.

1. **Elementary Physics.** Recitations and experimental lectures. Text: Carhart & Chutes' "Elements of Physics." Five hours credit. (Short Courses in Mining, first year, first and second terms, M., Tu., W., Th., F., 8. Short Course in Clay-working, first year; Short Course in Industrial Arts, second year, first and second terms, M. Tu. W. Th. F. 11.) Assistant Professor Kester.
2. **Mechanics and Heat. Electricity and Magnetism. Sound and Light.** Lectures and recitations. Three hours credit. (All four-year courses, second year, first, second and third terms, M. W. F. 9.) Professor Thomas.
3. **Physics.** Extension of Course 2, with practice in solution of problems. Two hours credit. (Courses in Electrical Engineering, Ceramics, Industrial Arts and Manual Training, second year, first, second and third terms, Tu., Th., 9.) Professor Thomas Assistant Professor Kester, Mr. Tuckerman.
4. **Electricity and Magnetism.** Lectures and recitations. Three hours credit. (Course in Electrical Engineering, third year, first term, M. Tu. Th. 10.) Professor Thomas.
5. **Physical Laboratory.** Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and in heat. Four hours credit. (Course in Electrical Engineering, second year, third term, M., Tu., 1-4, W., 1-3; or W., 1-3, Th., F., 1-4. Option, Course in Manual Training, third year, first, second and third terms, M., Tu., 1-4, W., 1-3.) Professor Cole, Assistant Professor Kester, Mr. Tuckerman.
6. **Physical Laboratory.** Theory and practice of magnetic and electrical measurement, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields; magnetic moments, permeability; work in light, including optical constants; spectroscopy; photometry of gas, electric and other lights. Five hours credit. (Course in Electrical Engineering, third year, first and second terms, M. Tu. W. 1-4.) Professor Thomas.
7. **Physical Laboratory.** Two credit hours. (Course in Mechanical Engineering, second year, second term, M., Tu., 1-3; or Th., F., 1-3.) Three hours credit. (Course in Mechanical Engineering, second year, third term, M., Tu., 1-4; or Th., F., 1-4.) Three to five hours credit. (First, second and third terms. Elective.) Professor Cole, Assistant Professor Kester, Mr. Tuckerman.
9. **Physical Laboratory.** A second year's work in Physical Laboratory. Course 9 must be preceded by Courses 6 or 7. Three to five hours credit. Elective. Professor Thomas, Professor Cole, Assistant Professor Kester.
11. **General Physics.** One lecture. Two laboratory periods a week. Three hours credit. Three terms. An elementary course for students who do not wish to do the more exact work of physics 2. The laboratory exercises are performed by the class in sections, each student or pair

of students in a section having a set of the necessary apparatus, and all working on the same experiment at the same time. Sec. I: Tu., Th., 8 to 10; Sec. II: Th., F., 2-4; Sections I and II: W., at 2 P. M. Professor Cole.

12. **Laboratory.** Three to five hours credit. Three terms. For those who have had, or who are taking physics 2. The work begins with measurements of length, mass and time, and the study of instruments. Each student works alone. When sufficient skill in general manipulation has been acquired, the student is allowed much liberty in the selection of his work. The apparatus provided is sufficient to permit him to work in any desired branch of physics. 'M., Tu., W., 1-4. Professor Cole, Assistant Professor Kester.

II. FOR ADVANCED UNDERGRADUATES AND GRADUATES

13. **Laboratory.** Three to five hours credit. Three terms. Prerequisites, a year's work in General Physics of college grade and a course in the laboratory, (Physics 2 and 12). May be taken as a graduate minor. Professor Thomas, Professor Cole, Assistant Professor Kester.
14. **Theoretical Physics.** Three to five hours credit. Three terms. For 1903-1904 the following subjects are offered:
 (a) Advanced Light, based upon Preston's "Theory of Light," with frequent reference to the original memoirs of Newton, Fresnel, Young, Fraunhofer, Michelson, Rowland, Stokes, Zeeman, etc. (b) Radiation, with special reference to the electro-magnetic theory of light. (c) Theory of Heat. (d) Theoretical Physics. Christiansen. A course in Differential Equations or Analytical Mechanics is desirable as preparation. (e) Evolution of Experimental Physics, with special reference to recent methods and results.
 Prerequisites for each of the above subjects, a year of College Physics (Physics 2) and Calculus. A laboratory course in Physics must precede or accompany. Professor Thomas, Professor Cole, Assistant Professor Kester.

III. FOR GRADUATES.

15. **Advanced Laboratory.** Three to five hours credit. Three terms. Research work. Prerequisites, two years of laboratory work in Physics. Professor Thomas, Professor Cole.

PHYSIOLOGY

(See Anatomy and Physiology.)

POLITICAL ECONOMY

(See Economics and Sociology.)

POLITICAL SCIENCE

(See American History and Political Science.)

PSYCHOLOGY

(See Philosophy.)

RHETORIC AND ENGLISH LANGUAGE

University Hall, Rooms 38, 40, 42, 44, 55

PROFESSOR DENNEY, ASSISTANT PROFESSOR GRAVES, ASSISTANT PROFESSOR MC-KNIGHT, ASSISTANT PROFESSOR DICKINSON.

RHETORIC AND COMPOSITION

1. **Paragraph Writing and Analysis of Prose.** Two hours credit through the

- year. The course includes two exercises weekly, in the writing of short themes, the outlining and composition of essays and speeches, and the study of illustrative texts for structure and form. Text-book, Scott and Denney's Paragraph Writing. Sec. I: M., Th., at 8; Sec. IV: Tu., F., at 8; Sec. VII: Tu., Th., at 9; Sec. VIII: Tu., Th., at 10; Assistant Professor Graves. Sec. II: M., Th., at 8; Sec. V: Tu., F., at 8; Sec. IX: Tu., Th., at 10; Sec. XI: M., F., at 11; Assistant Professor McKnight. Sec. III: Tu., Th., at 9; Sec. VI: Tu., Th., at 10; Mr. Pennock. Sec. X: Tu., Th., at 9; Sec. XII: Tu., Th., at 1. Assistant Professor Dickinson.
2. **Expository Writing.** Two hours credit. First term. In this course, practice is afforded in composing the various types of the essay, specimens of which are analyzed by the class. Text-book, Buck & Woodbridge's Expository Writing. Course 2 must be preceded by Course 1. Sec. I, II, III, IV, M., or Tu., and Th., or F., at 10; Sec. V: Tu., Th., at 11; Sec. VI: W., F., at 1. Professor Denney.
 3. **Brief Making and Written Argumentation.** Two hours credit, second and third terms. The course includes a study of the principles of logical analysis, evidence and argumentation; practice in writing briefs of noted speeches (Baker's Specimens); and in preparing original briefs with written arguments. Course 3 must be preceded by Course 1. It is recommended that Course 3 be preceded or accompanied by a course in logic. Sec. I, II, III, IV: M. or Tu., and Th. or F., at 10; Sec. V: Tu., Th., at 11; Sec. VI: W., F., at 1. Professor Denney.
 4. **Short Story Writing.** Three hours credit, first term. Lectures on story construction with plot-analysis of selected narratives and a study of their plan, purpose and diction; practice in composition, with individual and class criticism. Course 4 must be preceded by Course 2. M., W., F., at 9. Assistant Professor Graves.
 6. **Poetics.** Three hours credit, second and third terms. Lectures on the history and theory of poetry; prescribed readings and reports; a study of English meters, with exercises in verse-writing to illustrate the principal forms. Text-book, Alden's English Verse, with Aristotle's Theory of Poetry for reference. Course 6 must be preceded by Course 2. M., W., F., at 9. Assistant Professor Graves.
 10. **Advanced Composition.** Individual work is planned in this course for upper classmen who desire to continue practice in one or more of the forms of composition studied in preceding courses, or who seek criticism of articles intended for publication in newspaper or magazine. Each student will meet the instructor at stated periods for criticism and assignments. Course 10 may be undertaken at the beginning of any term. One hour credit, limited to three terms. Professor Denney.
 12. **Problems in Rhetoric and Criticism.** Two hours credit through the year. This course begins with a short series of lectures on the Development of Rhetorical and Critical Theory, after which each student undertakes the thorough investigation of some one problem in rhetoric and criticism, reporting results each week. Open to advanced undergraduates and graduates. Tu., 3 to 5. Professor Denney.
 13. **The Teaching of English.** One hour credit through the year. A discussion of principles and methods, plans for courses, and the reports of the English Conferences. Each member of the class will present a paper each term upon a subject assigned for investigation. Course 13 is open to advanced undergraduates and to graduate students. W., at 2. Professor Denney.

ENGLISH LANGUAGE.

15. **History of English and Development of Prose.** Two hours credit through the year. Text-books, Emerson's Brief History of the English Language, and Garnet's English Prose. Tu., Th., at 9. Assistant Professor McKnight.

16. **Old English Prose and Poetry.** Two hours credit through the year. Text-book, Sweet's Anglo-Saxon Reader. At first, attention will be paid to the purely linguistic features, the relations of Early English to the kindred Teutonic languages; later will be studied the beginnings of English literature in prose and poetry. M., W., at 9. Assistant Professor McKnight.
17. **Beginnings of English Story.** Beowulf and minor Old English narrative poems studied in connection with the related epic and romantic stories in Norse and in early German. First term. Celtic (mainly Arthurian) story in English studied in connection with the related stories in Celtic and in French. Second term. English stories belonging to the Charlemagne cycle. Third term. Not offered in 1903-4.
18. **Middle English Prose and Poetry.** Two hours credit through the year. First will be studied the development in sound and in orthography; later, the transition in literature, and the evolution of modern verse. Open to advanced undergraduates and to graduate students. Tu., Th., at 11. Assistant Professor McKnight.

GRADUATE COURSES

20. **Graduate Courses.** Under this number, courses are arranged at the beginning of each year to meet the needs of individual students desiring to pursue graduate work along either of two lines: (a) Rhetorical Theory and Criticism; (b) Old and Middle English Philology. Hours arranged. Professor Denney, Assistant Professor McKnight.

PUBLIC SPEAKING

21. **Essentials of Oral Discourse.** One-half hour credit. M., 8, 9, 10, 1, 2; Tu., 8, 9, 3; W., 11; Th., 8, 9; or F., 8.
22. **Declamation.** Two hours credit through the year. Course 22 must be preceded by Course 1. Tu., Th., at 10. Assistant Professor Dickinson.
23. **Debates.** Two hours credit, first and second terms. Course 23 must be preceded by Course 3. Limited to twenty members. W., 3 to 5. Assistant Professor Dickinson.
24. **Extempore Speaking.** Two hours credit. Third term. Course 24 must be preceded by Course 3. W., 3 to 5. Assistant Professor Dickinson.
25. **Oratory.** Two hours credit through the year. Analysis of noted orations; the writing and delivering of original orations. Course 25 must be preceded by Courses 2 and 3. Limited to twenty members. Tu., Th., at 2. Assistant Professor Dickinson.

ROMANCE LANGUAGES AND LITERATURES

University Hall, Rooms 35 and 34.

PROFESSOR BOWEN, ASSOCIATE PROFESSOR BRUCE, ASSISTANT PROFESSOR INGRAHAM,
MISS DE NAGY.

I. FRENCH

Note—Courses 1 and 2 in French must precede all others (except Course 3).

1. **Elementary French.** Four hours credit throughout the year. M., Tu., Th., F., at 10 or 11. Tu. W., Th., F., at 2. Three sections. Grammar: Fessler and Squair's or Grandgent's Essentials. Reader: Whitney's (Parts I and II), or Laboulaye's Contes bleus, or Bowen's First Scientific French Reader; historical and narrative prose; one or more prose comedies. In this course the study of the language is taken up from the beginning. Stress is laid upon the acquisition of a correct pro-

nunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end. Sight reading is emphasized. Sec. I: M., Tu., Th., F., at 10; Associate Professor Bruce. Sec. II: M., Tu., Th., F., at 11; Professor Bowen. Secs. III and IV: Tu., W., Th., F., at 2; Associate Professor Bruce and Miss De Nagy. Sec. V: Tu., W., Th., F., at 3; Miss De Nagy.

2. **Modern French Literature.** Four hours credit throughout the year. Two sections, at 10 and 11, M., Tu., Th., F. The study of the literature as such is now taken up. The work of the year covers a survey of two or more of the following subjects: (1) Contes; (2) Novels (Balzac); (3) Lyric Poetry (Bowen's Modern French Lyrics or Canfield's French Lyrics); (4) Romantic Drama (Hugo). Prose Composition (Bouvet or Chardenal). Lectures supplement the work; private reading required; systematic attention given to syntax and idiom. Open to those who have completed Course 1, or who have received credit for French as an entrance subject. Sec. I: M., Tu., Th., F., at 10; Assistant Professor Ingraham. Sec. II: M., Tu., Th., F., at 11; Assistant Professor Bruce.
3. **Science Reading.** Four hours a week throughout the year. M., Tu., W., Th., at 9. Herdler's Scientific French Reader and Luquiens' Popular Science, followed by other similar works. Prose Composition (Bouvet). A course introductory to the vocabulary of scientific literature. Intended for engineering and science students, and required of all students in the College of Engineering who offer French as their entrance language. Assistant Professor Ingraham.
4. **French Comedy of the Seventeenth Century.** Three hours credit. M., Th., F., at 10. First term. Study of the growth of French Comedy, with work centering upon Moliere (three plays) and Regnard. Lectures and collateral reading. Professor Bowen. Given biennially, alternating with course 16. Not offered in 1903-1904.
5. **French tragedy.** Three hours credit. M., Th., F., at 10. Second term. Lectures and readings. Cornelle, Racine and Voltaire. Critical study of *Le Cid*, *Andromaque*, *Esther* and *Zaire*. Professor Bowen. Given biennially. Not offered in 1903-1904.
6. **Seventeenth Century Prose.** Three hours credit. M., Th., F., at 10. Third term. Critical study of Descartes, Pascal, Bossuet and others (Warren's Selections), supplemented by lectures. Professor Bowen. Given biennially. Not offered in 1903-1904.
7. **Advanced Prose Composition.** One hour credit throughout the year. Tu., at 10. Bouvet's and Cameron's French Composition. Intended for advanced students who desire special training on the practical side of the language. Professor Bowen.
8. **Literary Criticism in France.** Two hours credit. Tu., Th., at 9. First term. Readings and lectures. Selections from Sainte-Beuve, Faguet, Lemaître and others. Associate Professor Bruce.
9. **Recent French Prose.** Two hours credit. Tu., Th., at 9. Second term. Rapid reading with lectures. Critical study of some of the leading prose writers of the present, such as Bourget, Daudet, Loti, Zola and others. Associate Professor Bruce.
10. **Practice in Speaking and Writing French—Based on Daudet's Stories.** Two hours credit. Tu., Th., at 9. Third term. Students wishing to elect this course must have the consent of the instructor in charge. Associate Professor Bruce.
11. **French Travel-Writers.** Two hours credit. Tu., Th., at 9. First term. Readings and lectures. Scenes of travel from Gautier, Hugo and Dumas. Associate Professor Bruce. Alternates with Course 8. Not offered in 1903-1904.

12. **Eighteenth Century Prose.** Two hours credit. Tu., Th., at 9. Second term. Readings and lectures. Selections from Voltaire (ed. Cohn and Woodward) or others. Associate Professor Bruce. (Alternates with Course 9. Not offered in 1903-1904.
13. **Advanced Conversational Practice. Based on Stories of Coppee and Maupassant.** Two hours credit. Tu., Th., at 9. Third term. Students wishing to elect this course must have the consent of the instructor in charge. Associate Professor Bruce. Alternates with Course 10. Not offered in 1903-1904.
14. **French Seminary A.** Three hours credit throughout the year. M., W., F., at 9. Open only to fourth-year students of French, who have completed Courses 1, 2, 4, 5, 6 and 7, or an equivalent. Given biennially. Not offered in 1903-1904. The subjects for the year 1904-1905 will probably be: (1) The Development of the French Novel, and (2) Recent Tendencies of French Drama. Toward the close of the year several lectures will be given on Methods of Teaching French and the Teacher's Equipment. Professor Bowen.
15. **French Seminary B.** Three hours credit throughout the year. M., W., F., at 9. The same conditions as in course 14. Given biennially. For 1903-1904 the subjects will be: (first half-year) Old French (Cledat, Moreaux choisis), with emphasis of la Chanson de Roland (Paris); (second half-year; Sixteenth Century French (Darmesteter et Hatzfeld, Moreaux choisis), with critical study of Montaigne. Professor Bowen.
16. **French Comedy of the Eighteenth Century.** Three hours credit. M., Th., F., at 10. First term. Lectures on the growth of French Comedy, with work centering upon Marivaux and Beaumarchais. Professor Bowen.
17. **French Society in the Seventeenth Century.** Three hours credit. M., Th., F., at 10. Second term. With special reference to the Precieux Movement. Crane's Selections. With lectures. Professor Bowen.
18. **Precursors of French Romanticism.** Three hours credit. M., Th., F., at 10. Third term. Rousseau, Chateaubriand (Bowen's Atala and Rene) and Madam de Stael. With lectures. Professor Bowen.

II. ITALIAN.

1. **Elementary Italian.** Two hours credit throughout the year. M., W., at 1. Grammar (Grandgent's or Edgren's), and Bowen's First Italian Readings. Comedy (Goldoni), and introduction to Dante (selections from Inferno). Students contemplating this course are advised to postpone such election until they have completed French 1, or its equivalent. Associate Professor Bruce. Omitted in 1903-1904.

III. SPANISH.

1. **Elementary Spanish.** Four hours credit throughout the year. Two sections. M., Tu., Th., F., at 11. Tu., W., Th., F., at 3. Grammar (Edgren's or Loiseaux's), and Reader; (Matzke's or Ramsey's stories and plays; composition and conversation. Assistant Professor Ingraham.
2. **Advanced Spanish.** Two hours credit throughout the year. T., Th., at 3. The modern novel; classical drama; Don Quixote; with lectures; advanced composition and conversation. Open to those who have completed course 1. Professor Bowen.

Sanskrit

(See Germanic Languages.)

Shopwork

(Industrial Arts and Shopwork.)

Sociology

(See Economics and Sociology.)

Spanish

(See Romance Languages.)

DEPARTMENT OF VETERINARY MEDICINE

PROFESSOR WHITE, PROFESSOR SISSON, ASSISTANT PROFESSOR BRUMLEY, MR. BROWN.

Free clinic is held for two hours daily (Saturdays included) at this building. Inasmuch as from 1000 to 1500 animals are treated annually at this clinic, the students have ample opportunity to learn in a practical way the best methods of treating diseased and injured stock.

11. **Veterinary Anatomy:** Osteology. Lectures illustrated with skeletons and anatomical preparations. Dissections. Ten hours credit. First term. Dr. Sisson.
12. **Myology, Splanchnology.** Practical dissections and demonstrations on cadavers. Ten hours credit. Second term. Dr. Sisson.
13. **Angiology and Neurology.** Lectures illustrated by drawings, in the dissecting room, and on anatomical models. Ten hours credit. Third term. Books recommended for reference and study: Stranveway's Veterinary Anatomy (new edition); Chauvau's Comparative Anatomy; McFaydean. Dr. Sisson.
14. **General Pathology and Morbid Anatomy.** First term. Text-book: Green's Morbid Anatomy.
Lectures and recitations for students of the second year. This course of study forms the foundation for Theory and Practice (Special Pathology), and embraces the study of the various disease processes. The lectures are supplemented by demonstrations of museum specimens, and by post-mortem examinations upon all cases which die in the College Hospital. The processes especially studied are: Inflammation, Functional Disturbances, Fever, Anatomical Changes, Hyperæmia, Anæmia, Hemorrhage, Thrombosis, Embolism, Degenerations, Tumors, Stones and Concrements. First term. Five hours credit. Dr. White.
15. **Theory and Practice of Veterinary Medicine.** Sporadic, non-infectious diseases. Five hours credit. Second term. Dr. White.
16. **Theory and Practice of Veterinary Medicine.** Five hours credit. Third term. Dr. White.
17. **Diseases of the Cow.** Special course for students in Dairying. Lectures and demonstrations consisting in the following: (a) Anatomy of the cow with special references to the digestive, reproductive and milk producing organs; (b) The more common non-infectious diseases of these organs and their treatment; (c) Most important infectious and contagious diseases and methods of preventing and dealing with them; (d) Practical methods of administering medicines, securing during operations, casting, etc. Three hours credit. Second term. W., Th., F., at 9. Dr. White.
18. **Surgical Diseases.** Three hours credit. Four terms. Text-books: Friedberger and Froehner.
19. **Clinic.** Lectures. Six hours credit. Six terms. Dr. White, Dr. Brumley, Dr. Brown.

21. **Theory and Practice.** Lectures; illustrated by practical demonstrations, by drawings, on clinical cases. Head and neck. First term, third year. Dr. White.

22. **Therapeutics.** Three hours credit. Third term, third year. Dr. Brumley.

23. **Obstetrics.** Five hours credit. Third term, third year. Dr. Sisson.

The course in Obstetrics is given during the third year, one term being devoted to this branch. The lectures, recitations and class-room demonstrations are amplified as much as possible by taking advantage of the clinical material afforded by an enviroing live-stock and dairying district.

Students have a particular advantage in coming in actual contact with cases of dystokia, foetal, placental, and maternal, and are required to assist in all obstetrical operations upon animals in labor, under the direction of the instructors.

24. **General Surgery.** Two hours credit. First term, first year. Dr. White.

25. **Practice in Operating.** Three hours credit. Second term, third year. Dr. White.

26. **Horse Shoeing.** This subject is taught by a series of about fifty lectures, recitations and demonstrations upon prepared specimens and clinical cases, and embraces the following: The anatomy of the horse's foot; relationship of the outer skin to the foot; parts nurturing the horn; how horn grows; physiological mechanism of the foot; relationship of the foot to the rest of the limb and the influence of conformation over forms of hoofs; flight of feet; forms of hoofs; judging horses for shoeing; preparation of the hoof for the shoe; summer and winter shoes; fitting shoes to the hoof; nails; hoof nurture; shoeing for defective gaits; shoeing for lameness; shoeing for faulty conditions of the horny capsule; use of rubber pads, buffers, etc. First term, third year, three hours credit. Dr. White.

27. **Meat Inspection.** Lectures and recitations. Three hours credit. Second term, third year. Dr. White.

Thirty-six recitations and lectures are given on the subject of Meat Inspection. These lectures include the normal character of the various organs of the meat-producing animals; rules and regulations for the inspection before and after slaughter; diseases due to the infestation with animal parasites; diseases due to the infection with vegetable parasites; putrid meat; over-heated meat; emaciated meat; foetal meat; natural death; abnormal odors and colorations of meat and fat; imperfect bleeding; disposition of diseased meat, etc.

As this course embraces much morbid anatomy, it is just as valuable to those who intend entering regular veterinary practice as to those who contemplate taking the civil service examination for meat inspectors in the Bureau of Animal Industry.

28. **Veterinary Anatomy.** (for Agricultural Students.) Brief outline of the anatomy of the horse and ox. Lectures, recitations, clinical practice and demonstrations. Four and one-half hours credit. First term. M., Tu., W., at 8. Clinical practice Th. afternoon. Dr. Sisson.

29. **Veterinary Practice.** (for Agricultural Students.) The more common diseases of a non-infective character, to which farm animals are subject. Minor surgery, castration, and the principles of horseshoeing are included in this course. Lectures, recitations and practicum. Four and one-half hours credit. Second term. M., Tu., Th., at 10. Practicum, Th. afternoon. Dr. White.

30. **Veterinary Practice.** (for Agricultural Students.) The most common infectious and contagious diseases affecting farm and dairy animals, and the most scientific methods of preventing, dealing with and treating the same. Lectures, recitations and practicum. Three hours credit. Third term. M., Tu., Th., at 10. Practicum, Th. afternoon. Dr. White.

31. **Canine Diseases.** Five hours credit. Second term, third year.

This course is taught by recitations, lectures, and practical demonstrations in the daily clinics and on subjects anaesthized for the operating table. Dr. Brumley.

Supplementary lectures will be given on the origin and history of the dog, psychical characteristics, zoological position of the dog, with a comparison of the different breeds of dogs, their peculiarities, habits, etc. One term of five hours each week.

33. **Ophthalmology.** A short course of twenty lectures is given on diseases of the eye. This course includes: Methods of examining the eye; the use of the ophthalmoscope; use of artificial and natural illumination; use of mydriatics; diseases and treatment of the organs surrounding and adjacent to the bulbus; diseases of the bulbus and their treatment. The lectures are supplemented by clinical demonstrations, and the students are given practice in the use of the most practical instruments for eye examinations. Third year, third term, two hours credit. Dr. White.

34. **Pathology Laboratory.** Three hours credit. Second and third terms, second year. Dr. Phillips.

36. **Pathology Laboratory.** Three hours credit. First term, third year. Dr. Phillips.

37. **Topographical Anatomy.** Five hours credit, first term, second year.

These are laboratory courses supplemented by lectures. They consist of three laboratory periods per week for an entire year, beginning with the second term of the second year and ending with the first term of the third year. The student is taught the correct methods of making autopsies and how to judge correctly ante-mortem and post-mortem changes in the tissues.

The holding of autopsies, preservation of tissues, the preparation, staining, microscopical examination and description of pathological tissue sections is done by the student. This course also includes the study of ecto and ento-parasites and pathologic bacteriology. Dr. Sisson.

ZOOLOGY AND ENTOMOLOGY

Biological Hall, Rooms 3, 4, 7, 8 and 9

PROFESSOR OSBORN, ASSOCIATE PROFESSOR HINE, ASSOCIATE PROFESSOR LANDACRE.

1. **Invertebrate and Vertebrate.** Open to first year students and preliminary to other courses. Three hours credit. Invertebrate, first and second term; Vertebrate, third term. This course includes a general discussion of groups, dissection of types and an outline of classification. Lecture. Tu., Th., at 8, or M., F., at 10; Professor Osborn. Associate Professor Landacre. Laboratory, Sec. I: M., 2-4; Sec. II: Th., 2-4; Sec. III: F., 2-4.
2. **Comparative Anatomy of Vertebrates.** Must be preceded by course 1 or equivalent. Three or five hours credit. Three terms. One hour quiz; two or four periods laboratory. Wiedersheim's Comparative Anatomy of Vertebrates is used as a basis. Quiz, W., at 1; Laboratory, W., Th., F., 1-4. Associate Professor Landacre.
3. **Economic Entomology.** Third term. Insects of forest, orchard and garden. A detailed study of injurious species intended particularly for students of Horticulture. The work includes field studies, collections, reports on observation, etc. Two and one-half hours credit. Lectures and recitations, Th., 9. Laboratory, Th., 1 to 4. Associate Professor Hine.
4. **Economic Entomology.** Three terms. This course must be preceded by course 1. A systematic study of the group of insects with special reference to injurious and beneficial species. A foundation is laid for

special study in Entomology. Preparation of collections, essays, life history studies and use of remedial measures along with laboratory studies on general anatomy. Two and one-half hours credit. Recitations and lectures, F., 9. Laboratory, first and third terms, F., 1 to 4. Winter term, Tu., 8 to 11. Associate Professor Hine.

5. **Economic Entomology.** First term. Insects of the household. Discussions of the different insects of importance in the household as injurious to food materials, clothing, carpets, draperies, etc. Fourth year; course in Domestic Science. Three hours credit. Tu., W., Th., 9. Professor Osborn.
7. **Systematic and Practical Entomology.** Third term. Two lectures and one laboratory period a week. An elementary practical course for students in the Short Course in Agriculture. Associate Professor Hine.
8. **Parasites of Domestic Animals.** First term. A lecture course devoted to the principal parasites affecting domestic animals intended especially to meet the needs of those who intend to give particular attention to stock raising. One hour credit. Elective. Time arranged. Associate Professor Hine.
9. **Special Entomology.** First term. Studies of life histories, collection and classification in selected groups. Field work and lectures. Four hours credit. Elective. Time arranged. Professor Osborn.
10. **Special Entomology.** Second term. Studies of winter condition of insects. Insecticides, insecticide machinery, methods of preparing insect illustrations, greenhouse pests, etc. Four hours credit. Elective. Time arranged. Professor Osborn.
11. **Special Entomology.** Third term. Investigations of selected groups or species. Lectures on insect legislation, distribution, natural enemies, special methods of control, etc. Four hours credit. Elective. Time arranged. Professor Osborn.
12. **Gross Anatomy of the Frog.** Must be preceded by course 1. Three or five hours credit. First term. Ecker's Anatomy of the Frog and Huxley and Martin's Practical Biology. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.
13. **Minute Anatomy of the Frog.** Must be preceded by course 1. Three or five hours credit. Second term. Continuation of 12, but devoted particularly to a study of the tissues. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.
14. **Embryology of the Frog.** Must be preceded by course 1. Three or five hours credit. Third term. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.
15. **Invertebrate Morphology. I.** Must be preceded by course 1. Three or five hours credit. First term. Devoted to lower Invertebrates, especially Protozoa and Coelenterata, Parker and Haswell, Lang, McMurrick, Shipley and other works are used for reference. Lecture, Tu., 2; Laboratory, M., Tu., W., Th., F., 2-4. Professor Osborn.
16. **Invertebrate Morphology. II.** Must be preceded by course 1. Three or five hours credit. Second term. Will usually be devoted to Worms and Mollusks. References as in 15. Lecture, Tu., 2; Laboratory, M., Tu., W., Th., F., 2-4. Professor Osborn.
17. **Invertebrate Morphology. III.** Must be preceded by course 1. Three or five hours credit. Third term. Usually devoted to Arthropoda. Above references and Packard's Text-book of Entomology. Lecture, Tu., 2; Laboratory, M., Tu., W., Th., F., 2-4. Professor Osborn.

18. **Invertebrate Embryology.** Must be preceded by course 1. Three or five hours credit. Three terms. Korschelt and Heider used as a basis. Lecture, Tu., 2; Laboratory, M., Tu., W., 1-4. Professor Osborn.
19. **Vertebrate Embryology: Karyokinesis, etc.** Must be preceded by course 1. Three or five hours credit. First term. Hertwig, Marshall, Balfour, Minot, Foster and Balfour are used as references. Lecture, M., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.
20. **Vertebrate Embryology: Chick and Mammal.** Must be preceded by course 1 and 19. Three or five hours credit. Second and third terms. Foster and Balfour used as a guide. Lecture, M., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.
21. **Comparative Neurology.** Should be preceded by course 1 or equivalent but is open to advanced students in psychology or pedagogy. Three or five hours credit. Three terms. Includes study of brain and spinal cord in all classes of vertebrates. Edinger, Lectures on the Central Nervous System is followed and numerous treatises and special papers consulted. Lecture, Tu., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.
22. **Cytology.** Three or five hours credit. Advanced course. Must be preceded by course 1 and equivalent of 2 or 15, 16, 17. Three terms. Hertwig, Cell and Tissues; and Wilson, The Cell in Development and Inheritance. Professor Osborn.
23. **Entomology.** Must be preceded by course 1. Three or five hours credit. Three terms. Advanced practical course for those wishing to investigate some special groups of insects or to fit themselves for professional work in Entomology. Lecture F., 1; Laboratory or field work, M., Tu., W., Th., F., 2-4. Professor Osborn.
24. **Ornithology.** Three hours credit. Three terms. Lecture and laboratory work on Morphology, Ecology and classification of birds. Laboratory, Tu., 9-11; Lecture, M., 10. Associate Professor Hine.
25. **Research Work.** Advanced undergraduate or graduate course. Must be preceded by course 1, and the equivalent of 2 or 15, 16, 17 or 19 and 20. Five or ten hours credit. Time to be arranged with individual students, or 9-12 and 2-5 through week. Professor Osborn.
26. **Seminar.** Discussion of assigned subjects, reports on research work, current literature, etc. Advanced and graduate students in the department are expected to register in this course. One hour credit, three terms. F., 4. Professor Osborn, Associate Professors Hine and Landacre.
27. **Teachers' Course.** In this course, which is intended especially for teachers and those who intend to teach, the work will consist of a presentation of the principles of zoology; a review of typical forms; discussion of the methods of instruction and investigation, and a course in laboratory practice for those who have not had such work. Two lectures, one laboratory period per week. Three terms. Two or three hours credit. Time to be arranged. Professor Osborn, Associate Professor Landacre.

ENROLLMENT

1902-1903

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

UNDERGRADUATES—243

Name.	Course	Course Hours	Credit Hours	Home Address
Adams, Charles Randolph.....	Agr.	212½	99	Prairie Depot
Albright, Henry Babbitt.....	Agr.	215	28	Columbus
Allen, Francis Lane.....	Agr.	215	53½	Van Wert
Alleshouse, Otto Clarence.....	Agr. (S.)	99	54½	New Bedford
Alt, Charles Pearl.....	Agr. (S.)	99	....	Baltimore
Andress, Fred Elmo.....	Agr.	215	47	North Amherst
Bales, William Robinson.....	Agr. (S.)	99	12½	London
Ballard, Walter Lane.....	Dairy	...	20	Cleveland
Barrett, Walter Case.....	Dairy	...	20	Crum Elbow, N. Y.
Batterson, Annie Elizabeth.....	Dom. Sci.	207½	158	Columbus
Beattie, James Herbert.....	H. & F.	214½	125½	Zanesville
Bennett, Jessie Hope.....	Dom. S. (S.)	100½	27½	Deavertown
Bernecker, McElvane Robert.....	Dairy	...	....	Emerson
Bickham, Clifford Albert.....	Agr. (S.)	99	102	Huntsville
Blachley, Bertha.....	Dom. S. (S.)	100½	97	Columbus
Blickensderfer, Charles Frederic.....	Agr.	215	....	Gnadenhutten
Bowman, Duiguid Abraham.....	H. & F.	218½	51½	Columbus
Bowser, Earl Levi.....	Agr.	215	85½	West Unity
Brandenburg, Peter Earl.....	Agr. (S.)	99	...	Campbellstown
Brintnall, Whiteside Lawrence.....	Agr. (S.)	99	6	Medina
Bugby, Morris O.....	Agr.	207½	174	Kingsville
Campbell, Clara Naomi.....	Dom. Sci.	205½	125½	Columbus
Chance, Jesse Ellsworth.....	Agr. (S.)	99	8	London
Clark, Webster Harry.....	Agr. (S.)	99	3	Medina
Clawson, Lucy Blanche.....	Dom. Sci.	203	49½	Okeana
Clawson, Opha Lee, B. Sc. (Dom. Sci.).....	....	....	....	Okeana
Clevenger, William Leander.....	Agr. (S.)	98	96½	Fletcher
Coe, Clarence.....	Dairy	...	21	Centerburg
Condit, Ira Judson.....	H. & F.	214½	108	Jersey
Cooperrider, Margaret.....	Dom. S. (S.)	100½	43	Brownsville
Crabb, Floi Euphemia.....	Dom. Sci.	205½	70½	Mt. Sterling
Crabb, George Arthur.....	Agr.	212½	69	South Warsaw
Crabb, James Byrl, B. Sc. (Agr.).....	....	....	....	Mt. Sterling
Crall, Homer Boyd.....	Agr.	215	28	Bucyrus
Crisman, Harry.....	Dairy	...	21	Centerburg
Crumrine, George Ray.....	Agr. (S.)	99	107	Nova
Cushman, Jared Meacham.....	Dairy	...	....	Woodstock
Davis, Charles Harrington.....	Dairy	...	21	Newark
Demuth, Charles Alfred.....	Agr. (S.)	99	23½	Waterville
Dickerman, Charles Edwin.....	Agr. (S.)	99	26½	Mallet Creek
Ditto, Theodore Walter, B. Sc. (Agr.).....	....	....	....	Delphos
Doneghue, Ray Claude.....	Agr. (S.)	99	102½	Columbiana Sta- tion
Drake, Alonzo.....	Agr.	215	35½	Bedford
Dreisbach, Orville Cornelius.....	Agr. (S.)	99	13	Findlay
Easton, Arthur Perry.....	Agr.	212½	111	Springboro
Echegaray, Salle.....	Agr. (S.)	99	90½	Argentine Re- public
Eckman, Otto Leo.....	Agr.	207½	145½	Brookville, Ind.
Eichelberger, Floyd Everett.....	Agr. (S.)	99	89½	Jeffersonville
Elliott, Porter.....	Agr.	215	54	West Mansfield
Eshenshade, John Weaver.....	Agr. (S.)	99	32	Binkley, Pa.
Estle, Fred.....	Agr.	215	51½	Springfield
Fast, Emmer Christian.....	Agr. (S.)	99	8	Napoleon
Ferguson, Ollie, B. Sc. (Agr.).....	....	....	....	Steubenville
Finney, Elkhana Elhana.....	Agr.	212½	112	Cedarville
Florence, Walter Tuttle.....	Agr. (S.)	99	102	Plain City
Ford, Clarence.....	Dairy	...	21	Calla
Foster, Chester Glenn.....	Agr.	212½	115½	London
Foster, Emma Warwick.....	Dom. Sci.	207½	134½	Higbys
Fromme, Nola Katherine.....	Dom. Sci.	203	53	Richmond, Ind.

Name.	Course	Course Hours	Credit Hours	Home Address
Fromme, Rudo Lorenzo.....	H. & F.	218½	71½	Richmond, Ind.
George, John Harry.....	Dairy	...	20	Beaver Falls, Pa
Grant, Lawrence.....	Dairy	...	5	Alliance
Green, Nathaniel Sexton.....	Agr. (S.)	99	...	Camp Dennison
Grogan, Thomas.....	Dairy	...	21	Wilmington
Groves, Walton Ellis.....	Agr. (S.)	99	54	Egypt
Guy, Earl William.....	Agr. (S.)	99	...	Mechanicsburg
Halverstadt, Clark J.....	Agr.	207½	116	Leetonia
Hamilton, Frank Edward, B. Sc. (Agr.)	...	...	...	Brownsville
Hamilton, Harry Hoge.....	Agr.	215	134½	Brownsville
Hamilton, Paul Ibbotson.....	Agr.	215	51½	Brownsville
Hammond, James Weston.....	Agr.	215	31	Blaine
Harned, Robey Wentworth.....	Agr.	215	46½	Greenville
Harter, Leslie Allison.....	Agr. (S.)	99	73½	Delaware
Harvey, George Crocker.....	Agr.	215	48½	Richmond, Ind.
Harvey, Winifred.....	Dom.S.(S)	100½	11½	Wilmington
Hatfield, Clifford Christian.....	Agr.	207	170	Lebanon
Haymaker, Fred Elon.....	Agr.	215	54	Ravenna
Heller, Otto.....	Dairy	...	21	Calumetville, Wis.
Hirsch, Frieda.....	Dom. Sci.	205½	105½	Columbus
Hoag, Franklin Jarvis.....	Agr. (S.)	99	17	Poplar Ridge, N. Y.
Holl, Edgar David.....	Agr. (S.)	99	129	New Berlin
Hollister, Ruth Amanda.....	Dom. Sci.	207½	159½	Galion
Hoover, Charles Potter.....	Agr. (S.)	99	57	Columbus
Hoover, Clarence Boal, B. Sc. (Agr.)	...	...	...	Columbus
Hoover, Esther.....	Dom.S.(S.)	100½	...	Munson
Hoover, Susan Corwin.....	Dom.Sci.	Spl.	140½	Columbus
Horr, Walter Bert.....	Dairy	...	21	Mechanicsburg
Houser, Charles Newton.....	Agr.	215	43½	Troy
Houser, True.....	Agr.	215	50½	New Pittsburg
Hudson, Clara Putnam.....	Dom. Sci.	Spl.	15	Middleport
Hummon, Simon Peter.....	Agr.	215	39½	Leipsic
Hunter, Cecil.....	Agr. (S.)	99	8	Catawba
Hussey, George Myron.....	Dairy	...	13	Lawton Station, N. Y.
Hyatt, Charles Daniel.....	Agr.	215	39	Augusta
Hyatt, Earle Edgar.....	Agr.	215	15	Clyde
Hyatt, James Vernon.....	Agr.	212½	106	Augusta
Hyatt, Wilbur Garfield.....	Agr. (S.)	99	17½	Augusta
Hyde, Crawford Fulton.....	Agr.	215	46	Frankfort
Hyde, George C.....	Agr. (S.)	99	43½	Warren
Hyslop, George Robert.....	Agr.	215	36	Deshler
Inskeep, Guy Hamilton.....	Agr.	215	47	Bellefontaine
Janeway, Mary Viola.....	Dom.S.(S)	100½	54	Columbus
Jenkins, Orville.....	Dairy	...	3	Sabina
Jennings, Otto Emery, B. Sc. (Agr.)	...	...	...	Olena
Jones, Lloyd, B. Sc. (Agr.)	...	...	...	Columbus
Judson, Harold Nelson.....	Agr. (S.)	99	13	Medina
Kauffman, Margaret Glenn.....	Dom.Sci.	Spl.	4	Columbus
Kellerman, Edna.....	Dom.Sci.	212½	91½	Lebanon, Mo.
Kelley, James Clinton.....	Dairy	...	13	Clarksville
Kinney, Edmund.....	H. & F.	218½	52	Yellow Springs
Knips, George.....	Dairy	...	11	Brooklyn, N. Y.
Kumler, Lester.....	Dairy	...	16	Basil
Ladrach, Fred Carl.....	Agr. (S.)	99	44½	Birmingham
Laird, Maurice Ellsworth.....	Agr. (S.)	99	52	London
Lanman, Faith Robinson, B. Sc. (Dom. Sci.)	...	...	...	Columbus
Lawrence, William Harris.....	Agr.	215	...	Columbus
Lichti, Emmet Irvin.....	Agr. (S.)	99	64	Tuscarawas
Logan, Ernest Jefferson.....	Agr. (S.)	99	35	Andrews
Long, Frank Clark, B. Sc. (H. & F.)	H. & F.	...	...	West Sonora
Main, Frank Roe.....	Agr. (S.)	99	...	Delaware

Name.	Course	Course Hours	Credit Hours	Home Address
Main, Joseph Allen.....	Agr.	215	48	Ostrander
Mangum, Benedict Wyley.....	Agr. (S.)	99	74½	North Benton
Mann, Ivand Ione.....	Dom.S.(S.)	100½	48½	Linden Heights
Martin William A.....	Agr.	215	65½	Kenton
Matthews, Bessie.....	Dom. Sci.	205½	69½	Sunbury
Mellinger, Charles Johnson.....	Agr. (S.)	99	20½	Springfield
Meriam, Oliver Frelinghuysen.....	Agr.	215	51½	Randolph
Mesloh, Harry Smith.....	Dairy	...	21	New Bremen
Meyers, Ada Lucy.....	Dom. Sci.	207½	158½	Columbus
Miller, Carl Everett.....	Dairy	...	18	Oregonia
Mills, Fred Pearl.....	Agr. (S.)	99	5	Marysville
Miner, Charles Austin.....	H. & F.	212	131	Bristolville
Miner, Charles Lewis.....	Agr.	215	31	Clyde
Minns, Edward Russell.....	Agr.	212½	132½	Lodi
Miskimen, Burt.....	Agr. (S.)	99	108½	Plainfield
Moore, Loyal Thomas.....	Dairy	...	11	Pataskala
Murray, Pitt Jones.....	Agr. (S.)	99	...	London
McBeth, Ira Guy.....	Agr.	215	33½	Georgetown
McClelland, Chester Arthur, B. Sc. (Agr.).....	...	...	...	Terrace Park
McClelland, George Cooper.....	Agr. (S.)	99	46½	Fredericktown
McClimans, Nellie Rhoda.....	Dom.S.(S.)	100½	87	Mt. Sterling
McClintock, James Earl.....	Agr.	212½	80	Summerfield
McKinley, Emma Evans.....	Dom. Sci.	205½	103½	Columbus
McMahon, Mary Gertrude, B. Sc. (Dom. Sci.).....	...	...	...	Columbus
McNutt, John Chester.....	Agr. (S.)	99	92½	North Kingsville
McOwen, James, Jr.	H. & F.	Spl.	167	Ovid
Neale, Alvin Scott.....	Agr.	212½	104½	Rock
Nichols, Anne Victorine.....	Dom.S.(S.)	100½	124	Chillicothe
Oberlin, Mary Lavinia.....	Dom. Sci.	205½	108	Massillon
Oliver, Clem Jones.....	Agr.	215	...	Chillicothe
Oliver, Lewis M.....	Agr. (S.)	99	3	Chillicothe
Orr, Anna Faye.....	Dom.S.(S.)	100½	43	Brownsville
Osborne, Charles Glenn.....	Dairy	...	20	Clarksville
Palmer, Lee Buckland.....	Agr. (S.)	99	68	Reynoldsburg
Palmer, William Henry.....	Agr.	212½	108½	Thurston
Parker, Lem Oris.....	Agr.	215	18	Findlay
Parkinson, John William.....	Dairy	...	21	Gowanda, N. Y.
Perkins, Charles Ray.....	Dairy	...	20	North Olmstead
Peters, Harley Edward.....	Agr. (S.)	99	41	Groveport
Petry, Edward Jacob.....	Agr.	215	13½	Gnadenhutten
Pettitt, Charles Hamilton.....	Dairy	...	21	Reynoldsburg
Pfaffman, George Arthur.....	Agr.	215	61½	Cleveland
Phallen, Oscar.....	Dairy	...	5	Granger
Pierce, Ralph Waldo.....	Dairy	...	20	Medina
Poindexter, Charles Cardoza, B. Sc. (Agr.).....	...	...	...	Parkersburg, W. Va.
Pontius, Frank March.....	Agr.	215	13½	Groveport
Post, Corwin Hover.....	Agr. (S.)	99	21	Spencerville
Poston, Emerson Scott.....	Agr.	207½	123½	Haydenville
Quiroga, Modesto.....	Agr.	207½	195	San Luis, Argen- tine Republic
Randabaugh, Mrs. Orville.....	Dom. S.	Spl.	80	Celina
Reiterman, Harry.....	Agr. (S.)	99	15½	Chillicothe
Rollison, Horace Seldon.....	Agr. (S.)	99	6	Pataskala
Roudebush, Earl Patchel.....	Agr. (S.)	99	18	Newtonsville
Roush, Ted.....	Agr. (S.)	99	52½	Russel's
Rowe, Harry Odell.....	Agr. (S.)	99	15	Belvidere, Ill.
Rubins, Frank.....	Agr.	207½	154½	Kenton
Ruhlen, Mrs. Mabel.....	Dom. Sci.	Spl.	5	Columbus
Schupbach, John.....	Dairy	...	20	Canton
Sewell, Ernest Maurice.....	Dairy	...	20	Yellow Springs
Shaw, Norman Ewing.....	H. & F.	218½	61	Nice

Name.	Course	Course Hours	Credit Hours	Home Address
Shepard, Ewart Ralph.....	Agr.	215	47½	Perry
Sherwood, Fred E.....	Dairy	...	...	Oregonia
Shields, Richmond Lee.....	H. & F.	218½	58½	Watkins
Sigrist, Lewis Marion.....	Agr.	215	33½	Congress
Silfa, Lazaro, Jr.....	Agr. (S.)	99	13	S.P. de Marcoris, Santo Dom.
Simkins, Carlos Guy.....	Dairy	...	18	New Vienna
Smith, Aaron Thomas.....	Agr.	215	18	Chester Hill
Smith, Charles Ralph.....	Agr. (S.)	99	20	Plain City
Smith, Henry Earl.....	Agr. (S.)	99	8	Germantown
Smith, Lindley M.....	Agr.	212½	108½	Chesterhill
Smith, Newton Connett.....	Dairy	...	21	Centerburg
Smith, Orma Jacob Burrell.....	Agr. (S.)	99	82½	Jamestown
Smith, Raymond F.....	Agr.	215	59	New Carlisle
Snyder, George Tillson.....	Agr.	215	48	Monroeville
Sparrow, Alfred.....	Dairy	...	5	Parkman
Spitler, Alice.....	Dom. Sci.	205½	88	Dayton
Stamets, Eva Belle.....	Dom. Sci.	203	...	Columbus
Stamets, Grace May.....	Dom. Sci.	203	...	Columbus
Stephenson, John Earl.....	Agr. (S.)	99	...	Ansonia
Stevens, Nellie Elizabeth.....	Dom.S.(S.)	100½	3	Whitmore Lake, Mich.
Stevenson, Andrew Dee.....	Agr. (S.)	99	31½	Murphysville
Steward, Alice Ione.....	Dom. Sci.	207½	134	Columbus
Stillwell, Margaret.....	Dom. Sci.	205½	73½	Columbus
Stinchcomb, Clarence Evans.....	Agr.	215	29	Perry
Stingel, Brishen Otto.....	Agr. (S.)	99	54	Coshocton
Stormont, John Earl.....	Dairy	...	21	Xenia
Sullivan, Fannie Augusta.....	Dom. Sci.	207½	159½	New Carlisle
Tangemann, Clara Margaret.....	Dom. Sci.	207½	15+	New Bremen
Tangemann, George.....	Dairy	...	21	Kettleville
Tebbs, George Owings.....	Agr.	215	18	Winchester
Thompson, Benjamin Lee.....	Agr.	215	46½	Jersey
Thompson, Bertha Louise.....	Dom.S.(S.)	100½	66½	Columbus
Thompson, Glenn Otto.....	Agr. (S.)	99	90	Cedar Valley
Thompson, Loula Belle.....	Dom. Sci.	203	68	Georgetown
Tillman, Opal Ione.....	Dom. Sci.	205½	119½	Columbus
Tonkinson, Roy.....	Agr. (S.)	99	29½	Xenia
Topliff, Harry Lewis.....	Agr. (S.)	99	135½	La Rue
Twitchell, Lee Downs, B. Sc. (H. & F.).....	...	...	...	Mansfield
Tyrell, Brenness Hawley.....	Agr. (S.)	99	42	Kingsville
Underwood, Zephaniah.....	Dairy	...	...	Wilmington
Van Meter, William George.....	Dairy	...	...	Philadelphia, Pa
Wald, Earnest David.....	Agr.	212½	67½	Wauseon
Walkden, Chester Arthur.....	Agr. (S.)	99	3	Elyria
Wallace, Edwin.....	Agr.	215	56½	Wooster
Warrick, George Henry.....	Agr. (S.)	99	20	Washington, Pa.
Washburn, Wayne.....	Agr. (S.)	99	96	Greenwich
Watt, Vivian.....	Dom. Sci.	207½	115½	Freeport
Weakley, Arthur Algernon.....	Dairy	...	21	Baltimore
Weaver, Joseph Elias.....	Agr. (S.)	99	10	North Point, Pa.
Weist, Dwight Wilson.....	Agr. (S.)	212½	108	Basil
Wells, Bertram Whittier.....	H. & F.	218½	30½	Toledo
West, Burton Louis.....	Agr.	215	27	Marengo
West, Frederick Long.....	Agr.	212½	98½	Bloomingsburg
Wetherby, Walter Henry.....	Dairy	...	20	Columbus
Wheeler, Thomas Leroy.....	Agr.	207½	157	Chillicothe
White, James Chalmers.....	Agr.	212½	108½	Lebanon
Wilder, Garfield James.....	Agr.	215	61	Elyria
Willis, Rolla Goodrich.....	Agr. (S.)	99	27½	Delaware
Winter, Thomas Raymond.....	Dairy	...	21	Worthington
Wright, Edith Betsy.....	Dom. Sci.	203	51	New Vienna
Wright, Lillian Augusta.....	Dom.S.(S.)	100½	22½	Middlefield
Young, Robert Armstrong.....	Agr. (S.)	99	67	Cleveland
Zehring, Edgar Levi.....	Agr.	207½	145½	Germantown

COLLEGE OF ARTS

GRADUATE STUDENTS—38

	Home Address
Andrews, Catherine Emily, B. A., Wellesley College.....	Columbus
Brace, Edith Minerva, B. S., University of Nebraska.....	Columbus
Burr, Harriet G., B. A.....	Worthington
Butcher, Frederick Eric, B. Ph.....	Buckland
Chandler, Grace Eleanor, B. A., University of Chicago.....	Columbus
Converse, Edward Jasper, B. A., B. D., Yale University.....	Columbus
Cook, Melville Thurston, A. B. Leland Stanford University, M. A., De Pauw University.....	Greencastle, Indiana
Coover, Winifred Forrest, B. A., Otterbein University.....	Dayton
Coursalt, Jesse Harliaman, M. A.....	Columbus
Derby, Alice Greenwood, B. Ph.....	Columbus
Easton, Ernest Doane, B. S.....	Springboro
Eisenlohr, Berthold August, B. Ph.....	Cincinnati
Ewalt, Clara Converse, B. Ph.....	Columbus
Frankham, Charles R., B. A., Otterbein University.....	Westerville
Gauch, James Arlando, B. A.....	West Manchester
Harrington, Evaline, B. Ph., Wooster University.....	Columbus
Huntington, Charles Clifford, B. Ph.....	Yellow Springs
Jones, Grace Latimer, B. A., Bryn Mawr College, A. M., ibid.....	Columbus
Kauffman, Henrietta Christine, B. Ph.....	Columbus
Kirby, Harriet R., B. A.....	Columbus
Klein, David, B. Ph.....	Columbus
Muiree, Frederic John, B. A.....	Youngstown
Mumma, Marion Wilson, B. Sc.....	Dayton
Pennock, Gilbert Lee, B. A., Antioch College.....	Yellow Springs
Rasor, Samuel Eugene, B. S., M. A.....	Clayton
Rhoades, William Robert, B. A., Otterbein University.....	Fostoria
Riddle, Lumina Cotton, B. S., M. S.....	Milford Center
Rogers, Andrews, B. Ph.....	West Jefferson
Sanders, Ernest Avery, B. A., Otterbein University.....	Westerville
Sanders, James Glossbrenner, B. Ph., Otterbein University.....	Westerville
Sater, Marae, B. A., Smith College.....	Columbus
Snively, Harry H., B. A.....	Columbus
Starlin, Charles Ethelbert, B. S., Miami University.....	Preston
Swezey, Otto Herman, B. A., Lake Forest University, M. A., North- western University.....	Rockford, Illinois
Talbot, Mignon, B. A.....	Columbus
Webb, Edward Nathan, B. S.....	Rome
Whetstone, Arnot Wilson, B. Ph., Otterbein University.....	Van Buren
Williams, Herbert O., B. A., M. A.....	Columbus

UNDERGRADUATES—490

Name.	Course	Course Hours	Credit Hours	Home Address
Abernathy, Edward Robert.....	14	Columbus
Adair, Henry Sebastian.....	66	McConnelsville
Adams, Elizabeth Jane, B. A.....	Columbus
Alexander, Raymond Worthington.....	39	Xenia
Anderson, Dwight Spencer.....	44	Cleveland
Anderson, Esther Elizabeth.....	11	Jewett
Anderson, Oren J.....	67	Newark
Appelbaum, Meyer.....	35	Columbus
Arnold, Mary Louise.....	162½	Columbus
Artz, Bertha.....	49	Plain City
Arundel, John Francis.....	45	Home City
Atwood, James Franklin.....	45	Zanesville
Augspurger, Eugene Richard.....	70	Lebanon

Name.	Course	Course Hours	Credit Hours	Home Address
Bacon, Daisy Deane.....	87	Columbus
Baird, Charles Kumlner.....	57½	Hamilton
Baldwin, Mabel Dennison.....	61¼	Columbus
Ball, Ernestine Faye, B. A.....	Columbus
Bancroft, Katherine.....	42	Columbus
Banker, Claude Rex.....	48	Poast Town
Bebout, William Rupert, B. A.....	5	Wheeling, W.Va.
Beebe, Hugh McDowell.....	48½	Sidney
Beer, James Anderson, B. Sc.....	Ashland
Beggs, Harold Sargent.....	28	Columbus
Bellows, George Wesley.....	90	Columbus
Berry, Fred.....	45	Peebles
Berry, Mary.....	105½	Peebles
Bever, Mabel Margaret.....	48	Columbus
Bever, Roscoe Conklin.....	19	Columbus
Beyer, William A. L.....	48	Arlington
Biebl, Andrew J., B. Sc.....	Gibbon, Minn.
Bigelow, Bernard Barton, B. Ph.....	Findlay
Birnie, James Harry.....	138	Marietta
Bixler, Earl Adelbert.....	94	Mt. Gilead
Blakeley, Nellie Dean.....	63	Columbus
Boles, Lawrence C.....	36	Blanchester
Bonnet, Alvin Cook, B. A.....	Columbus
Booth, Carl Howard, B. Ph.....	Columbus
Booth, Cora Vrooman, B. Ph.....	Columbus
Borror, Louis Edison.....	39	Columbus
Bowers, Ida Olive.....	89	Columbus
Bowman, Ethel Eugenie.....	28	Columbus
Bradford, Frances Elizabeth, B. Ph..	Columbus
Branson, Maude.....	Jackson
Braunlin, Carl Gustave.....	47	Portsmouth
Brennan, Raymond.....	48	Columbus
Bridge, Effie Irene, B. A.....	Columbus
Brinkerhoff, Josiah.....	93	Utica
Browne, E. Stanley.....	5	Columbus
Brown, Sarah Rebecca.....	99	Columbus
Brugger, Harvey, B. Sc.....	Clyde
Bryant, Mrs. Birdie.....	86	Columbus
Bryant, David Clifton.....	114	Columbus
Bryce, Ethel.....	42	Columbus
Buck, Ralph William.....	143½	Cardington
Budd, Harold A.....	70	Perrysville
Bugbey, Harry Homer.....	114	Waverly
Burnett, Whittier, B. Ph.....	Waynesville
Burns, Sara L.....	133¼	Columbus
Campbell, Clinton Arthur.....	43	Piqua
Campbell, Robert.....	160	Toledo
Carmack, Caroline.....	170½	Columbus
Carpenter, Edwin Alfred.....	27	Columbus
Carpenter, Frank Simpson.....	67	Carpenter
Carpenter, Jessie Marie, B. Ph.....	Columbus
Chaffee, Ward Osborne.....	25	Columbus
Chambers, Sherman Daniel.....	48½	West View
Chaney, Alta Jane.....	45	Columbus
Chaney, Benjamin E.....	10½	Blanchester
Christopher, Harry V.....	London
Claggett, Arthur E., B. Ph.....	Dayton
Clark, David Burns.....	83	Shandon
Clark, John T.....	89½	Louisville, Ky.
Clark, Margaret B.....	71	Columbus
Clark, Shreve.....	47½	Akron
Claypool, Garrett Sheller.....	34	Chillicothe
Clements, Jerry Riley.....	145	Waverly
Clevenger, Joseph Franklin, B. Sc.....	Fletcher
Coates, Elmer William.....	165½	Pomeroy

Name.	Course	Course Hours	Credit Hours	Home Address
Cockley, William Barney.....	151½	Lexington
Colgan, Grace Veronica.....	29	Columbus
Colton, Louise	47	Columbus
Cone, John Charles, B. Ph.....	Hamilton
Cook, Emma Jane.....	25	Columbus
Cooper, Joseph Bliss.....	48	Columbus
Cornell, Fred A.....	36	Columbus
Cosgrave, Frank Lofland.....	71½	Zanesville
Covert, Florence Cecelia.....	63	Columbus
Cox, Lewis Clark.....	92½	Xenia
Coy, Lawrence William.....	Dean
Coy, William Stacey, B. A.....	Columbus
Craig, Francis Miron.....	98	Clarion, Pa.
Crane, Joseph Thompson.....	42	Columbus
Crew, Fleming Harold.....	82	McConnelsville
Cromer, Howard	43	Troy
Crout, Ray Durand.....	145½	Columbus
Crowley, Frank	45	Dayton
Curry, Lucille	72	Columbus
Daney, Norman Lewis.....	42½	Elyria
Dann, Florence Esther.....	90	Columbus
Dann, Grace Adele.....	104	Columbus
Darby, Clarence Leroy.....	34	Columbus
Davidson, Ruth Emily, B. Ph.....	Chicago
Davis, Franklin Levi.....	154	Columbus
Davis, Joseph D.....	101	Columbus
Dean, Charles Collins.....	Ashland
Deatrick, Laura	30	Columbus
De Camp, Mary A.....	36	De Funiak Springs, Fla.
Delay, Frank	122	Jackson
Demorest, Ralph H.....	159½	Marysville
Derby, Walter Janney.....	154½	Columbus
Dickey, Francis Wilber.....	84	Clintonville
Dieterman, Hedwig Louise.....	35	Columbus
Dillin, Ernest Stewart.....	138½	Coshocton
Dolson, Benjamin Reimmund, B. Ph..	Lancaster
Dowler, Edwin Ernest.....	85½	Washington, C. H.
Duckworth, George Edgar.....	83	West Liberty
Dugan, Edna Loretto.....	49	Wellsville
Dye, Sidney Ogier.....	26	Hamden
Dyer, Werter Clarkson, B. A.....	Junction Plano
Early, Katharine Belle.....	142½	Columbus
Eastman, Katharine, B. Ph.....	Columbus
Easton, Frank C.....	48	Columbus
Eaton, Esther	116	Columbus
Echols, Lenore Carrel.....	151½	Columbus
Eichelberger, Frank	45	Urbana
Eisele, Mary Pearl.....	112½	Columbus
Elliott, Alice Merkle.....	10	Columbus
Elliott, Lucy Cable.....	124	Columbus
Erb, Theresa	164½	Columbus
Erwin, Sampford	Danville, Ky.
Evans, Adah Jane.....	Columbus
Fawcett, Mrs. Mary E.....	41	Columbus
Finley, Irma A.....	45	Xenia
Flory, Charles Henry.....	135	Arcanum
Foster, Ralph Akin.....	146	Columbus
Frederick, Joseph Allen.....	85	East Liverpool
Freeman, Ada Marian.....	90	Chillicothe
Freeman, Phoebe Grace.....	55	Chillicothe
Freilich, William	42	Zanesville
Froch, Charles	11	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Fuller, Gilbert L.....	45	Portsmouth
Gardner, Earl Douglas.....	94	Columbus
Gardner, Frank William.....	141	London
Garman, Susan Editha, B. Ph.....	Dayton
Geissinger, Anthony Wayne.....	45	Columbus
Gerard, Charles Wesley.....	48	Columbus
Gill, Cassandra A.....	24	Columbus
Glass, Harriet H.....	40	Columbus
Glass, Melle Wilson.....	168½	Columbus
Gordon, Ruth.....	36	Columbus
Gorham, Ira Garfield.....	155	Perrysville
Gorrell, Emilie Cordelia.....	46	Columbus
Grant, Ruth Matilda.....	157½	Columbus
Gratigny, Florence Amanda.....	86	Columbus
Gray, Mrs. Ethel Surface.....	8	Columbus
Gray, Wayne Coulter.....	48	Columbus
Greenwood, Helen Tuttle.....	139½	Columbus
Gress, Katharine.....	48	Pomeroy
Griffiths, Rea Grace.....	45	Columbus
Griggs, Robert Fiske, B. Sc.....	Columbus
Griswold, Robert Charles.....	85	Elyria
Guitard, Claude B., B. Ph.....	New Bedford
Haesler, Anna M.....	146½	Springfield
Hagenbuch, George Edwin, B. Ph.....	Urbana
Harbarger, Sada Annis.....	48	Columbus
Hare, Russell Ingman.....	79¾	Marysville
Harrington, Harry Franklin.....	115	Columbus
Harsh, John Marion.....	85½	Cleveland
Harshman, John Burnett.....	140½	Alpha
Hartman, Robert.....	45	Upper Sandusky
Hauss, Herbert Winfield.....	38	Wapakoneta
Heekin, Robert Emmet.....	36	Cincinnati
Hegelheimer, Louis Joseph.....	45	Columbus
Hengst, James McCleary.....	141½	Lancaster
Heston, Frank M.....	87½	Pataskala
Highwarden, Ethel Williams.....	30	Columbus
Hill, Alva Jay.....	50	Columbus
Hite, Bertha C.....	129	Columbus
Hoffhine, John.....	152½	Frankfort
Hoffman, George Thomas.....	143	Malta
Hollister, Mary Fuller.....	139½	Galion
Holmes, William B. Gleason.....	139½	Braddock, Pa.
Holt, Mabel Stevens.....	96	Columbus
Holtermann, Ernestine.....	42	Columbus
Hommon, Harry Britton, B. Ph.....	Marble Cliff
Hopwood, Harry Le Voy.....	85	Kenton
Hopwood, Ruth Potter.....	45	Kenton
Houston, Mark Chapeze.....	90	Urbana
Hoyer, Ralph Waldo.....	45	Columbus
Huff, Pearl Frances.....	17	Warren, Indiana
Hugger, Frederick William.....	86	Ironton
Huling, Frank, B. A.....	Columbus
Hunt, Esie M.....	6	Dewittville, N.Y.
Hunter, Marie Douglas.....	Columbus
Huntington, Hugh.....	33	Columbus
Huntington, Katharine Darlington.....	120	Columbus
Hyde, Jesse Earl.....	45	Lancaster
Hyde, Robert Linton.....	55	Frankfort
Iams, Jesse Dorsey.....	97	Sheridanville, Pa.
Ingalls, Osmer Charles.....	96	Camp Chase
Jackson, Clifford Webster.....	139½	Columbus
Jackson, Gertrude See.....	154½	Columbus
Jackson, Paul Gray.....	8	Columbus
Jacoby, Mrs. S. C., B. A.....	Columbus
Jennings, William Silver.....	144½	Eaton

Name.	Course	Course Hours	Credit Hours	Home Address
Johnson, Lowell Carleton.....	26	Waverly
Jones, Martha Margaret.....	48	Columbus
Jones, Owen C.....	Columbus
Jordan, Annice Fishback.....	5	Columbus
Jordan, Jeanne Thomas.....	45	Columbus
Keating, Edwin Russell.....	12	Columbus
Keating, Miriam Grace.....	30	Columbus
Keiser, Forest Le Grand.....	167	Bryan
Keiser, Jay G.....	45	Bryan
Kellough, Robert Wallace.....	Range
Kelly, Mary Agnes.....	48	Mt. Vernon
Kern, Blanche M.....	139½	Columbus
Kewish, William Henry.....	34	Painesville
Kewley, Joseph Edward.....	43	Toledo
Kindle, Joseph Henry.....	79	Centerville
King, John Randolph.....	36	Magnetic Sprgs
Kinkade, Walter Moxley.....	51	Marysville
Kiplinger, Herman M.....	31	Dayton
Knox, John Dorsey.....	138½	Homeworth
Koch, Matilda.....	20	Columbus
Kochheiser, Charles C.....	129	Bellville
Kohn, Harry.....	48	Columbus
Kohr, Paul Homer, B. A.....	Columbus
Kollar, Joseph Blain.....	42	New Philadel- phia
Krumm, Nettie Belle.....	30	Columbus
Laizure, Grant Arlington.....	43	Dennison
Lanman, Anne Boughton.....	46	Columbus
Lawrence Mary Elizabeth.....	57	Columbus
Laylin, Clarence Dewey.....	119½	Norwalk
Lazarus, Fred, Jr.....	12	Columbus
Leahy, Katherine Blanche.....	14	Columbus
Leonard, Hannah Margaret, B. Ph....	Columbus
Leonard, Mary Wallis.....	28	Columbus
Lewis, George Herbert.....	119	Leo
Lewis, Oscar M.....	19	Leo
Lindsey, Helen Brown.....	8	Middletown
Lisle, Thomas G., B. Ph.....	Columbus
Lloyd, James Arthur.....	48	Columbus
Loechler, Elsa.....	157	Columbus
Loomis, Homer Leslie.....	146½	Columbus
Lorbach, David, Jr.....	133½	Waverly
Loren, Mary McMillan, B. Ph.....	Columbus
Love, Jacob Wainwright.....	52	Warren
Lucas, Ralph Moliere.....	77	Columbus
Mack, Egbert Hiram, B. Ph.....	Sandusky
Mackintosh, Ralph Taggart.....	46	East Liverpool
Maddock, Enoch Salt.....	54	Columbus
Maerker, Grace Elfrida.....	39	Napoleon
Magley, Chauncy Edward.....	Decatur
Malloy, Nellie.....	9	Columbus
Malloy, Walter.....	4½	Columbus
Malone, James Bernard.....	142½	So. Charlestown
Manning, Eva Belle.....	40	Columbus
Mark, Clara Gould.....	104	Milo
Mark, Mary Louise, B. A.....	Columbus
Mark, Robert Matthew.....	145½	Milo
Markeson, Clara E.....	7	Columbus
Marsh, Alice Roxanna.....	44	Columbus
Martin, William Kookan, B. Ph.....	Lancaster
Massey, Herbert.....	40	Malta
Mauk, Margaret E.....	48	Columbus
Mead, Charles Searing.....	158½	Columbus
Means, Hugh Jackson.....	79	Columbus
Medbery, George.....	76	Reynoldsburg

Name.	Course	Course Hours	Credit Hours	Home Address
Medbery, Olive	117	Reynoldsburg
Medberry, Roston	154½	Columbus
Meek, Paul Deady	71	Columbus
Merrick, Lawrence Hildreth	159¾	Zanesville
Metcalf, Florence May	99	Columbus
Metcalf, Thomas Rees	45	Columbus
Miesse, Frank H., B. Ph.	Chillicothe
Mitchell, Lynn Boal, B. A.	Piqua
Mitzenberg, Fannie Katheryn	154½	Columbus
Moist, Harvey Clinton	55	Kinsey
Molloy, Mary Aloysia, B. Ph.	Sandusky
Mooney, Will Crittenden, Jr.	45	Woodsfield
Moore, Mrs. Ellis P.	4	Columbus
Moore, Thomas H.	28	Ashland
Morris, Mary Elizabeth	48	Columbus
Morris, Samuel	90	Bloomingsburg
Morrison, James Spindler	45	Ashville
Morse, Max Withrow, B. Sc.	Columbus
Morton, Max De Los, B. Ph.	Ashtabula
Myers, Herbert Merton	96	West Alexandria
McAlpine, Maud A.	142½	Columbus
McAlpine, Vera Lois	45	Columbus
McCampbell, Eugene Franklin	142½	Marysville
McClelland, Cloys Peter	155	Columbus
McClure, Charles Walter	45	Germantown
McClure, Roy Donaldson	145½	Columbus
McCorkle, Raymond Andrew	92½	Warren
McDermith, Mary E.	Columbus
McDonald, Ethel	39	Columbus
McDonald, Grace Irene	88	Celina
McDowell, James Keen, B. Ph.	Columbus
McFadden, Meta	10	Westerville
McGugin, Elizabeth Winifred	156½	Olive Furnace
McIlroy, Glenn Greeley	39	Irwin
McKinley, Mary Ann	134¼	Trinway
McKinney, Mary Eula	48	Columbus
McKittrick, Charles J.	19	Cambridge
McKitterick, William George	95	Jackson
McLeod, Frank Garfield	96	Central College
McPherson, Clarence Githens	136	Xenia
Nachtrieb, Clarence R., B. Ph.	Wauseon
Napper, Charles William	44½	Greenfield
Neiswender, Clay F.	52	Grove City
Newman, Dick Finley	9	Mechanicsburg
Nichols, Marion Louise	96	Chillicothe
Norris, Jay M.	45	Columbus
Norton, Caroline Clemence	139½	Columbus
Nye, William Augustus	73	Zanesville
O'Brien, Charles Francis, B. Ph.	Urbana
Oman, Roy Hedges	51	Ashville
Ornstein, Sigismund	250	Bulgaria
Ortman, Earl Hill	142½	New Salem
Overturf, Alva Kendall	144	Columbus
Owen, Lloyd Gamble	86	Magnetic Sprgs.
Paine, Seth Webb	78½	Columbus
Pansing, Wilbur	77	Miamisburg
Parrett, Frank Coffman	144½	Washington C.H.
Parrish, Raleigh	Decatur
Parrish, Zona Gazelle	12	Columbus
Paterson, Robert Gildersleeve	80	Columbus
Patridge, Robert Warren	18	Columbus
Pegg, Flora Lillian	87	Columbus
Pegg, Katharine Amos	90	Maple Heights
Pence, Raymond Woodbury	96	Columbus
Peterson, Niels Mortensen	96	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Phillips, Lydia	108½	Columbus
Pilcher, Benjamin Luther.....	130½	Canaanville
Pirrung, Mary Clara.....	26	Columbus
Pluddemann, Paul W.....	177	Columbus
Porter, Minnie Ella, B. Ph.....	New Philadel- phia
Poste, Mignon.....	48	Columbus
Postle, Carl Haldy, B. Ph.....	Columbus
Postle, Carlton David.....	142	Alton
Postle, Clara Williamson.....	87	Columbus
Potter, Katharine May.....	96	Columbus
Powell, Raymond Thompson.....	81	Columbus
Pratt, Allan Harlow.....	13	Minerva
Pratt, Edna Stuart.....	146½	Columbus
Pratt, Jean Paul.....	66½	Huntington
Preston, Horace.....	9	Rendville
Priest, Curtis Verne.....	16	Newark
Randall, Rita.....	142½	Columbus
Randall, Sherman.....	Columbus
Rankin, Stanley F.....	105	Columbus
Rarey, Ralph Forrest.....	53	Columbus
Raymond, Stockton.....	89½	Columbus
Rector, Fred I.....	6	Columbus
Rector, Howard Burns.....	23½	Circleville
Redrow, Clara M., B. Ph.....	Williamsburg
Reed, Charles Robert.....	27	Ceraopolis, Pa.
Reeder, Charles Wells.....	48	Columbus
Reel, Stella Merion.....	48	Columbus
Reichenbach, Frances Marie.....	20	Columbus
Rhotehamel, Roland H.....	Lancaster
Richardson, Robert Edwin, B. A.....	Toledo
Ridenour, Frank.....	32	Jackson
Roberts, Cora Ruth.....	48	Columbus
Roberts, Helen Estelle.....	84	Columbus
Robinson, Ellis Astor.....	96	Ostrander
Robinson Helen Burnett.....	84	Plain City
Rocky, Noble Warren.....	76½	Dayton
Rodebaugh, Mabel Catherine.....	97	Marysville
Roekel, Frederick Augustus, B. Ph.....	Zanesville
Romick, Mabel Jane.....	84	Hilliards
Rothrock, Maynard Wilbur, B. A.....	Akron
Rusk, Raymond Edgar.....	107	Columbus
Sackett, Florence Margaret.....	67	Columbus
Salt, Clifford Green.....	58	Columbus
Salt, Nellie Elizabeth.....	99	Columbus
Sapp, Gladys M.....	14	Columbus
Scarlett, William Joseph.....	154½	Columbus
Schaaf, Hazel Inskeep.....	62	Columbus
Schanfarber, Celia.....	52	Columbus
Schlesinger, George Fenele.....	45	Xenia
Schmieding, George Henry.....	42	Dayton
Schoedinger, Annabel Elizabeth.....	48	Columbus
Shoedinger, George Richard.....	48	Columbus
Schubert, Floribel Caroline.....	49	Columbus
Scofield, Darline.....	22	Columbus
Scofield, Stanley Thompson.....	81	Columbus
Seymour, Edith Athey.....	131½	Columbus
Seymour, Nellie May.....	67	Columbus
Shackelford, Elmer Amos.....	58	Tipton, Missouri
Shaeffer, Raymond.....	63½	Coshocton
Sharp, Mary Etta.....	33	Columbus
Shawan, Harold Koch.....	99	Columbus
Sheets, Nellie Florence.....	136½	Columbus
Shelton, Florence Elnora.....	40	Columbus
Sheridan, Elizabeth.....	27	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Sherman, James G.....	6	Columbus
Sherwood, Herbert M.....	5	Warren
Shoemaker, Carl David.....	146½	Napoleon
Shride, Mabel Margaret.....	48	Columbus
Siebert, May Margaret.....	32	Columbus
Simpson Warner Pike, B. Ph.....	Worthington
Skimming, Wilbert Babb.....	172	Wilmington
Smead, Annie Elizabeth.....	144	Columbus
Smith, George Taylor.....	20	Egypt
Smith, John Albert.....	90	Arcanum
Smith, Marian Florence.....	Columbus
Snyder, Wilbur E.....	45	Ironton
Souder, Charles Granville, B. Sc.....	Lafayette, Ind.
Sperr, Frederick William, Jr.....	49	Houghton, Mich.
Sproat, Martha Evans, B. Ph.....	Columbus
Staley, Homer F.....	178	Columbus
Stark, Charles J.....	51	Findlay
Stauffer, Clinton R., B. Sc.....	Columbus
Stephens, Jessie Frances.....	82	Columbus
Steward, James Clarence.....	145	Marcy
Stiver, Joseph Alfred.....	107½	Columbus
Strickler, Lois Lenore.....	99	Columbus
Stuart, Dee Daniel.....	48	Dayton
Summer, Samuel Nathan.....	100	Shelby
Surface, Frank Macy.....	150½	Eaton
Sutton, Sylvester.....	24	Zanesville
Tallmadge, Harold Hedges.....	72¾	Columbus
Tatje, Oral D., B. Ph.....	Columbus
Taylor, Helen.....	48	Columbus
Taylor, Mary Eva.....	48	Columbus
Taylor, Mary Hill, B. Ph.....	Columbus
Thacker, Alice Arnold.....	48	Columbus
Theobald, Hulda.....	23	Columbus
Thomas, John Ralph.....	70½	Columbus
Thomas, Laura Parsons.....	105	Columbus
Thomas, Phillips.....	159½	Columbus
Thompson, Bessie Agnes.....	144½	Columbus
Thompson, Harriet Faye.....	22	Jersey
Thompson, Lester William.....	31	Gallipolis
Thompson, Ray Washington, B. Ph.....	Gallipolis
Tinsley, Sybil Lucille.....	30	Columbus
Tipton, William Howard.....	90	Caldwell
Tressel, Laura Amella.....	149½	Columbus
Troutman, Joseph Carl.....	45	Columbus
Turley, Charles Elzea.....	6	Shepard
Turner, Bertha Louise, B. Ph.....	Columbus
Turner, Emma Etta.....	84	Columbus
Twitchell, Charles.....	40	Mansfield
Vercoe, Helen.....	34	Columbus
Vogel, Katherine Augusta.....	41	Columbus
Wacker, Alma Henrietta.....	162½	Columbus
Wagner, Bessie.....	90	Columbus
Walker, Maie.....	48	Plain City
Walsh, Frances Lyon B. A.....	Columbus
Walsh, Gertrude Margaret.....	45	Columbus
Walter, Alexander W.....	2	Edinburg
Ward, Elizabeth Hester.....	9	Columbus
Warner, Cecil Elisha.....	149½	St. Paul
Warner, John Howell, B. A.....	Leek, N. Y.
Weaver, Mima Jacobs, B. Ph.....	Dayton
Webber, Mrs. Ernestine.....	Columbus
Weber, Mary Isabelle.....	155	North Broadway
Weedon, Homer H.....	22	Cambridge
Welling, David Cramer.....	93	Worthington
Welling, Florence Edna.....	45	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Wells, Ralph P.....	18½	Lisbon
Wertz, Dwight Elmore.....	14	Dalton
Westwater, Rose	Columbus
Wheeler, Mildred.....	46	Brookfield
Whetsel, Jas. Anderson Garfield, B. A.	Columbus
Whipp, Wendell Edwin.....	96	Dayton
Wilbur, Mrs. Hollis Adelbert.....	25	Columbus
Wilcox, Charles C.....	48	Columbus
Wilkinson, John Anderson, B. Sc.....	Piqua
Williams, Ethel Kennedy.....	18	Columbus
Williams, Harold R.....	88	Urbana
Williams, John Clark.....	128	Walnut Grove
Williamson, Irene.....	50	Columbus
Williamson, Ralph Leslie.....	13	Columbus
Willis, Roche Carl.....	142	Columbus
Wilson, Alice Carrie.....	73¾	Aiton
Wilson, Carl B.....	48	Penfield
Wilson, John M.....	15	Deerfield
Wilson, John Tudor.....	48	Columbus
Wilson, Mary E.....	28	Columbus
Wing, Lucius Arthur, B.Sc.....	Columbus
Wing, Shirley Townshend.....	12	Columbus
Woodbury, Ethel.....	84	Columbus
Young, Carl Houseman.....	140	Columbus
Young, Mrs. Ethel Denune.....	167	Columbus
Zartman, Luke V.....	45	Columbus
Zehring Robert Henry.....	84	Miamisburg

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Name.	Course	Hours	Credit Hours	Home Address
Aleshire, Charles Elmer.....	C. E.	77½	Jackson	
Alsdorf, Robert Clyde.....	M. E.	161½	Utica	
Ames, E. Holiday, C. E. ....	.....	...	Columbus
Anderson, Walter Stewart.....	C. E.	58½	Mt. Vernon	
Andrews, William H., jr.....	E. M. (S.)	5	Columbus	
Armstrong, Hugh Cook.....	E. E.	124½	Clintonville	
Armstrong, Thomas Hudson, jr.....	M. E.	115½	Woodsfield	
Armstrong, William Wirt.....	C. E. (Spl.)	32	Woodsfield	
Arter, James Starr.....	Eng.	59½	Lisbon	
Asher, Clyde Blaine.....	C. E.	106½	London	
Aubrey, Arthur James.....	Cer. (Spl.)	23	Youngstown	
Aylsworth, Warren.....	Eng.	55½	Columbus	
Babbitt, Frank Mitchell.....	Eng.	67½	Columbus	
Bailey, Ervin George, M. E.....	.....	...	Damascus
Bailey, John Sherman.....	Eng.	66½	Cleveland	
Bailey, William Jesse.....	Eng.	55½	Damascus	
Baker, George Rogers.....	Eng.	...	Newark	
Baker, Hugh Jacob.....	Arch.	115½	Daytos	
Baker, Nathan	Eng.	2½	Leipsic	
Barienbrock, Charles Henry.....	C. E.	118½	New Bremen	
Barnett, Earl Robinson.....	Eng.	4½	Washington C.H.	
Barr, Mahlon E.....	Eng.	38½	Upper Sandusky	
Barringer, Robert Reyburn.....	E. M.	57	Washington C.H.	
Barry, William John, C. E. ....	.....	...	New Straitsville
Bartholomew, Harold Criswell.....	E. E.	80	Newark	
Bartholomew, Linn	Eng.	22½	Bellefontaine	

Name.	Course	Course Hours	Credit Hours	Home Address
Bartholomew, Tracy.....	Eng.	46½	168½	Bellefontaine
Bates, Wallace Norton.....	Eng.	...	...	Elyria
Beach, Howard Lindsley.....	E. E.	168½	168½	Glen Ridge, N. J.
Beall, Charles Ray.....	Eng.	55½	55½	West Lafayette
Bebout, Guy Burnette.....	C. E.	99½	99½	Wheeling, W. Va.
Bedwell, Charles Francis.....	E. E.	80	80	Columbus
Beeks, Joseph R.....	Eng.	14	14	Canal Winchester
Beer, Thomas.....	Chem.	106½	106½	Ashland
Bell, Wakeman Clark.....	C. E.	106½	106½	Dorchester, Mass.
Benedict, Eric Wilson.....	E. E.	168½	168½	Waterbury, Conn.
Bennett, William Edward.....	Chem.	18½	18½	Akron
Berger, Edwin Leroy.....	Eng.	55½	55½	Bucyrus
Berman, Samuel.....	Eng.	48½	48½	Cleveland
Berry, Charles Watson.....	Cer. (S.)	28	28	Columbus
Beutler, Frank Ernest.....	E. E.	111½	111½	Greenville
Dillings, Edward Jay.....	Eng.	61½	61½	Willoughby
Bisant, Frank Jewett.....	Eng.	...	...	Columbus
Bishop, Herbert J.....	Eng.	55½	55½	Ashley
Bloom, Emanuel M.....	Eng.	38½	38½	Cleveland
Bomesberger, Walter Nelson, E. M.....	.....	...	...	Columbiana
Bone, Evan Paul.....	E. E.	105½	105½	Lebanon
Boos, Warner.....	Ind.Arts(S.)	13	13	St. Marys
Boothman, Dale Maxwell, M. E.....	.....	...	...	Bryan
Bostater, Herbert Lee.....	E. E.	187½	187½	Ney
Bowdle, George Frederic.....	C. E.	78	78	Piqua
Brandon, Bruce Armstrong.....	M. E.	95½	95½	Prairie Depot
Brannan, Thomas Hayes, C. E.....	.....	...	...	Marysville
Brashear, Charles.....	Eng.	55½	55½	Columbus
Brashear, Edward Rosemond, C. E.....	.....	...	...	Columbus
Bredbeck, Walter B.....	Eng.	52½	52½	Danbury
Bridgeman, Benjamin Lonnis.....	C. E.	151½	151½	Syracuse
Brillhart, Howard Edwin.....	M. E.	73	73	Newark
Brindle, Tracey.....	Eng.	55½	55½	Ashland
Briney, H. Clifford.....	Eng.	46½	46½	Woodstock
Britton, Guy.....	C. E.	147½	147½	Simons
Brooks, Benjamin Talbott.....	Eng.	54	54	Columbus
Brooks, Herbert Barton, E. E.....	.....	...	...	Piqua
Brophy, Patrick Joseph.....	E. M. (S.)	...	...	Frostburg
Brown, Carrol G.....	E. E.	16½	16½	Cleveland
Brown, George H.....	Eng.	55½	55½	Doylstown
Brown, Walter Alexander.....	Eng.	...	...	Columbus
Browne, George W.....	Eng.	9½	9½	Columbus
Brownlee, Fred Leslie.....	Eng.	50½	50½	Columbus
Bryan, Merrill Logan.....	Eng.	45½	45½	Ironton
Bucher, Bertram Hamilton.....	(Spl.)	9	9	Columbus
Bucher, John Wesley.....	Eng.	62½	62½	East Liverpool
Bumann, Cecil Spencer.....	C. E.	57½	57½	Bunker Hill, Ill.
Bumann, Harry Otto.....	C. E.	89½	89½	Litchfield, Ill.
Burgess, Arthur Luis.....	E. E.	55½	55½	Columbus
Burgoyne, Charles Lyman, jr.....	Eng.	4½	4½	Norwood
Burnham, Locke Henry.....	E. E.	110½	110½	Columbus
Burrell, George A.....	Eng.	30	30	Cleveland
Burrell, Glenn Smith.....	C. E.	163½	163½	Mt. Pleasant
Bushey, Charles Lester.....	(Spl.)	62	62	Shelby
Bushman, Frank Orville.....	C. E.	42½	42½	Mt. Pleasant
Caldwell, Boyd Cummings.....	Eng.	43½	43½	Columbus
Call, Leland Everett.....	Eng.	45	45	Darrowville
Cameron, Gaylor Malcom.....	C. E.	166½	166½	Jeromeville
Cameron, James L.....	Arch.	166½	166½	Malvern
Campbell, John Grant.....	E. E.	140	140	Dayton
Campbell, Willis Elmer.....	Chem.	114	114	Fostoria
Carmichael, Robert.....	Cer. (S.)	61	61	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Carpenter, Howard H.....	Eng.		64½	Columbus
Cartzdafner, Roy Edwin, M. E.....			...	London
Case, Louis Benjamin.....	Eng.		55½	Mt. Gilead
Casebeer, Elmer Robert.....	C. E.		106½	Canal Dover
Chaffin, Wendel Wilson.....	C. E.		162	Dayton
Chambers, William Royal.....	M. E.		161½	Damascus
Chaney, Ralph Clarke.....	Eng.		55	Columbus
Chatterton, Rollin Mace.....	Eng.		55½	Troy
Chester, Walter D.....	Eng.		14½	Rome
Chittenden, Hardy Alton.....	Eng.		7	Columbus
Christman, Elmer John.....	Eng.		36	Galion
Chubb, Charles St. John, jr.....	Arch.		152½	Columbus
Chubb, Joseph Horace.....	C. E.		191½	Columbus
Chubb, Lewis Warrington.....	E. E.		116½	Columbus
Clapp, Charles Elmer.....	Eng.		8½	Middletown
Clark, Orelia Bradford.....	M. E.		110½	Columbus
Clark, Thomas Walter.....	Cer.		158½	Shawnee
Cobb, Norval Henry.....	Eng.		55½	Warren
Cobb, William Stiles.....	Eng.		56½	Warren
Cockins, Frederick Dietz.....	Chem.		114½	Columbus
Coe, Elmer Ransom.....	Eng.		55½	Columbus
Coe, Harry Dean.....	Eng.		47½	Columbus
Cole, John Russell.....	Eng.		63½	Columbus
Coleman, Grafton.....	Eng.		61½	Westfield
Colgan, John Ambrose.....	Eng.		47½	Columbus
Collins, Lee Sanford.....	Eng.		48½	Kelley's Island
Compton, Harry E.....	Cer (S.)		...	Columbus
Conley, Elmer Clyde.....	E. E.		81½	Omaha, Neb.
Connors, John Leo.....	M. E.		103½	Columbus
Conrad, Herman William.....	M. E.		107½	Troy
Cook, Spencer Nye, E. M.....			...	Chillicothe
Cooper, Albert Bray.....	Ind.Arts (S.)		18	Uhrichsville
Cooper, David R.....	C. E. (Spl.)		61½	Caldwell
Cooper, Sheldon Dill.....	E. E.		108½	Youngstown
Corkery, Stanley William.....	Ind. Arts (S.)		34	Toledo
Cornell, Charles Brown.....	M. E.		105	Columbus
Coulter, Leonard Burnside.....	Cer.		160½	Oxford
Cox, George William.....	C. E.		47½	Trinway
Craft, Frank Marion.....	E. E.		116½	Columbus
Craig, Clarence Eli.....	Eng.		18½	Washington C.H.
Craig, Paul Selwin.....	C. E.		126½	Shreve
Cranston, Harry Dow.....	Eng.		55½	Columbus
Crayton, Guy A.....	Eng.		38	Lima
Crocker, Theodore Doane.....	E. E.		167½	Cleveland
Croner, Elmer William.....	E. M.		100½	Troy
Crooks, Thomas Elliott.....	E. E.		196½	Van Wer.
Croy, Harold Lee.....	Eng.		46½	Columbus
Cummins, Taylor.....	Eng.		45½	Sidney
Cunningham, Fredonia Nixon.....	Eng.		12	Steubenville
Cunningham, Robert Henry, jr.....	M. E.		115½	Columbus
Curran, Michael Francis.....	C. E.		103½	Corning
Curtis, Cyrus Martindale.....	M. E.		55½	Kirtland
Daerr, Louis August.....	Eng.		50½	Newark
Dare, Edward Matthewss.....	Cer.		35½	Zanesville
Darst, Otto Custer.....	(Spl.)		44½	Columbus
Davis, Daniel Charles.....	Chem. (Spl.)		20	Jackson
Davis, William Benjamin.....	Eng.		28½	Columbus
Dawson, Edwin Ellis.....	Ind. Arts (S.)		61	New Brunswick, N. J.
Day, Harry Schall.....	Eng.		34½	Steubenville
Dean, Walter Odell.....	Eng.		50½	Lima
Demorest, Dana James.....	Chem.		114½	Marysville
Dickerson, Samuel Clyde.....	Eng.		17½	Columbus
Dickinson, Morris L.....	(Sp.)		5	Columbus
Dickinson, Ralph Vivian.....	Eng.		17½	Columbus

Name.	Course	Course Hours	Credit Hours	Home Address
Dollison, Arthur Howell.....	Eng.		55 $\frac{1}{2}$	Pleasantville
Dorsey, Walter Alfred.....	M. E.		167 $\frac{1}{2}$	Newark
Doty, Oliver Perry, jr.....	E. M.		178 $\frac{1}{2}$	Gervais
Downing, Ralph Hooper.....	Eng.		55 $\frac{1}{2}$	Lima
Draving, John Henry.....	Eng.		17	Piqua
Dudley, Chester Knight.....	Eng.		...	Columbus
Durbin, William Howard.....	Eng.		43 $\frac{1}{2}$	McConnellsville
Dyche, Howard Edward.....	E. E.		109 $\frac{1}{2}$	Spring Valley
Eagle, William Howard.....	C. E.		95 $\frac{1}{2}$	Lakefork
Eberly, Clarence F.....	Eng.		58 $\frac{1}{2}$	Perrysburg
Ecker, Harrison G.....	E. M.		135 $\frac{1}{2}$	Columbus
Eddy, Blaine Justus.....	Eng.		28 $\frac{1}{2}$	Shreve
Edwards, Fred Glen.....	Eng.		35	Youngstown
Embrey, Morrow Lewis.....	Eng.		50	Richwood
Emswiler, John Edwin, M. E.....	.....		...	Morgan Center
Enyeart, Charles F.....	Eng.		39 $\frac{1}{2}$	Troy
Escobar, Raphael.....	E. E.		102 $\frac{1}{2}$	Puerto Principe, Cuba
Evans, William E. jr.....	Eng.		44	Chillicothe
Ewing, Harry E.....	Eng.		47 $\frac{1}{2}$	Dayton
Eysenbach, Louis, jr., C. E.....	.....		...	Delphos
Farley, Thomas Jay.....	Eng.		55 $\frac{1}{2}$	Columbus
Farquhar, Ivan Alexander.....	Eng.		55 $\frac{1}{2}$	Bucyrus
Farquhar, Leo J.....	Eng.		50 $\frac{1}{2}$	Bucyrus
Fay, Byron Ayres.....	M. E.		129 $\frac{1}{2}$	Columbus
Fay, Sherman.....	M. E.		206 $\frac{1}{2}$	Wyoming
Feather, Robert John.....	Ind.Arts (S.)		42	Columbus
Feeman, John Henry.....	E. M.		110	Columbus
Fefcht, Edward Rall.....	M. E.		166 $\frac{1}{2}$	Dayton
Felger, T. Haines.....	Eng.		61 $\frac{1}{2}$	New Springfield
Fenstermaker, Charles Howard.....	C. E.		106 $\frac{1}{2}$	Basil
Figlesthler, E. Walter.....	Eng.		49 $\frac{1}{2}$	Chillicothe
Fisher, Charles Samuel.....	Eng.		64 $\frac{1}{2}$	Flushing
Fiske, Alfred Lee.....	Eng.		7	Dayton
Fitzer, Joseph Benton.....	E. M. (S.)		81	Wellston
Flowers, Dean Wilcox.....	E. M.		127 $\frac{1}{2}$	Columbus
Forbes, Edward Woodruff.....	Eng.		44 $\frac{1}{2}$	Fern Bank
Forster, Charles Thomas.....	Eng.		73 $\frac{1}{2}$	Stryker
Foss, Clarence Milton.....	Eng.		47	Carthage
Foster, Vance, E. M.....	.....		...	Higby
Fox, Arthur Lowell.....	Eng.		60 $\frac{1}{2}$	Dayton
Franzheim, Charles Merts.....	Cer. (S.)		40	Wheeling, W. Va.
Frost, George Prescott.....	(Spl.)		42	Metheun, Mass.
Frost, Harry Talfourd.....	Eng.		55 $\frac{1}{2}$	East Liverpool
Fuller, Charles William.....	E. M.		156 $\frac{1}{2}$	West Madison
Fulton, James Stewart, jr.....	M. E.		143 $\frac{1}{2}$	Steubenville
Funk, Leo William.....	(Spl.)		134 $\frac{1}{2}$	Chester Hill
Furnas, Joseph Merrill.....	Ind. Arts (S.)		32	Columbus
Gableman, John Wesley.....	Eng.		46	Waverly
Gage, Samuel Wallace.....	C. E.		116 $\frac{1}{2}$	Eagle Bridge, N. Y.
Galbreath, Alfred Webster.....	C. E.		90 $\frac{1}{2}$	Columbus
Gallen, Joseph Michael.....	M. E.		107 $\frac{1}{2}$	Columbus
Gard, Irving.....	Eng.		55	Columbus
Gardner, Charles Croxell.....	E. M.		70 $\frac{1}{2}$	East Liverpool
Garretson, Joseph Alfred.....	Cer. (S.)		38	Columbus
Gault, Paul Max.....	E. E.		83	North Jackson
Gehres, Hewitt Adam.....	M. E.		93	Waverly
George, Clarence Edward.....	Eng.		41	Mt. Vernon
Gerwick, Benjamin Clifford.....	Eng.		55 $\frac{1}{2}$	Zanesville
Gibson, John Chester.....	Eng.		48 $\frac{1}{2}$	Washington, Pa.
Gillig, John Thornton.....	Eng.		...	Decatur, Ind.
Glass, Robert Gibson.....	Eng.		38 $\frac{1}{2}$	Clinton, W. Va.
Glunt, Omer Martin.....	Eng.		53 $\frac{1}{2}$	Union City, Ind.

Name.	Course	Course Hours	Credit Hours	Home Address
Goddard, Harry Eldon.....	Eng.		67½	Wellston
Gorrell, Edmund Morgan.....	E. E.		147½	Bellaire
Gotschall, James Leroy.....	Eng.		47½	Minerva
Gould, William Stewart.....	M. E.		158½	Wyoming
Graef, Forrest.....	Ind. Arts (S.)		68	Piqua
Greaves, Walker Arthur Frederick...	Cer. (S.)		89	Cleveland
Green, Edward Leon.....	Eng.		36½	Cambridge
Greenamyer, Paul Adin.....	Eng.		61½	Columbiana
Grener, August.....	Eng.		35	Camp Chase
Greter, Frederick.....	Eng.		54	Middletown
Griffin, Carl Hawthorne.....	Cer. (S.)		90	Columbus
Guiss, Charles Alfred.....	C. E.		103½	New Washington
Gwynne, Josiah Walker.....	E. E.		151½	Wheeling, W.Va.
Hackney, William Wesley, jr.....	M. E.		150½	Dayton
Hadsell, Harry Irvin.....	Chem.		70½	Hartwell
Hagaman, Fred B.....	Eng.		55½	Mt. Vernon
Hagemeyer, Earle Price.....	C. E.		94½	Norwood
Hagenbuch, Frank.....	Eng.		24	Urbana
Haines, Arthur.....	Eng.		...	Sabina
Hall, Charles Ritchie.....	M. E.		98½	Columbus
Hallsted, Robert Harcourt.....	Eng.		61½	Columbus
Hamilton, Ross Elroy, C. E.....	.....		...	Keene
Hammond, Clyde Ellsworth.....	E. E.		113½	Wheeling, W.Va.
Handley, Scott Milton.....	Eng.		...	Richwood
Hange, Frederick Irving.....	Eng.		61½	Lodi
Hard, Ernest.....	Eng.		...	Powell
Harding, Robert Lee.....	Eng.		50½	New Philadel- phia.
Harrington, Alfred Lewis.....	E. E.		144½	Xenia
Harris, Ambos Mahon.....	E. M.		105½	Columbus
Harris, Clarence Blunt.....	Ind. Arts (S.)		29	Struthers
Harris, Ralph Neander.....	E. E.		53½	Columbus
Harris, Walter Blasdel.....	Cer. (S.)		70	Ogden, Utah
Hawthorne, Carl Henderson.....	C. E.		139½	Cambridge
Hayden, Florence Kenyon.....	Arch.		125½	Columbus
Hayes, James Garfield.....	C. E.		35	Columbus
Haynes, Frank Leslie.....	M. E.		65½	Frankfort
Hecker, Ralph Edwin.....	Eng.		39½	Warren
Helvey, George Stanley, M. E.....	.....		...	Hamilton
Henney, John Lankford Woolbach....	Cer. (S.)		55	Columbus
Hepner, Charles Randolph.....	E. E.		113½	Columbus
Hepner, Jacob William.....	Eng.		55½	Columbus
Hibbard, John Hamilton.....	Eng.		48	Columbus
Hill, Cortland Latimer, C. E.....	.....		...	Berlin Heights
Hill, Ray Corson.....	Eng.		22	Toledo
Hirst, Edgar.....	Ind. Arts (S.)		50	Yellow Springs
Hirst, Harry, E. M.....	.....		...	Midvale
Hite, Florence Elizabeth.....	Arch.		165½	Columbus
Hobbs, Caleb.....	E. E.		109½	Barnesville
Hock, John Aloysius.....	M. E.		56	Columbus
Hogue, Clyde, Weinland.....	Eng.		29	Toledo
Holl, Alfred Tennyson.....	Eng.		55½	Canton
Holloway, Thurman Welferd.....	M. E.		158½	Zanesville
Holloway, Walter A.....	Eng.		9	Columbus
Holmes, Carl Gilbert.....	Cer.		99	Hillsboro
Hood, Willard J.....	M. E.		161½	Cambridge
Hoover, Frank Garfield.....	Ind. Arts (S.)		154½	New Berlin
Hope, Harry Leroy.....	E. E.		107½	Paint
Hopps, Charles Howard.....	Eng.		52	Hamilton
Houston, Hugh M. Bole.....	Eng.		43	Struthers
Howard, Howard Raymond.....	Eng.		61½	Columbus
Howe, Roy Edwin.....	E. M.		161½	Lodi
Hughes, Earle Ocala.....	C. E.		86½	Hamilton
Hultquist, Victor Jonas.....	Ind. Arts (S.)		84	Jamestown, N.Y.
Humphrey, Harold Phelps.....	Cer.		162½	Elkland, Pa

Name.	Course	Course Hours	Credit Hours	Home Address
Hunter, James Williamson.....	C. E.		161½	Zanesville
Hunter, Rutherford Hayes.....	Eng. (Spl.)		25½	Berrysville
Hurlbut, Charles Clayton.....	Eng.		55½	Gibsonburg
Ichler, Warren.....	Eng.		45½	Kenton
Inskeep, Clair Allen.....	Eng.		44½	Bellefontaine
Ireland, Guy G.....	Eng.		55½	Blanchester
Jackson, Benjamin Anderson.....	Eng.		10	Columbus
Jackson, Frank Herbert.....	Eng.		55½	Brookland D. C.
Jackson, James Francis.....	E. M. (S.)		45	Frostburg
Jacobi, Jacob Albert.....	C. E.		105½	Greenville
James, Frank Richard.....	E. M.		111	Columbus
Jancu, Joseph.....	E. E.		97	Berlad, Roumania
Jaynes, Gaylord Clark.....	Eng.		55½	Columbus
Jeannot, Frederick Cotton.....	M. E.		119½	Youngstown
Jenkins, W. Guy.....	Eng.		17	Columbus
Jones, Clayton M.....	Eng.		37½	Jamestown, N. Y.
Jones, Granville Reynard.....	C. E.		141½	Columbus
Jones, Louis.....	Eng.		65½	Cleveland
Jones, Thomas Murray.....	Eng.		34	Marble Cliff
Judson, Walter Raymond, M. E.....			...	Dayton
Kalb, Warren Cornelius.....	E. E.		168½	Beaverdam
Kempton, Willard Hoyt.....	E. E.		164½	Trimble
Kerr, Charles Henry.....	Eng.		63½	Cleveland
Kerr, James William.....	Eng.		29	Cadiz
Kettering, Charles Franklin.....	E. E.		175	Loudonville
Kilmer, Arthur David.....	Eng.		55½	Troy
King, Henry Frederick.....	C. E.		59½	Columbus
Klaus, Frederick J.....	Cer. (S.)		44	Los Angeles, Cal.
Klie, Walter, M. E.....			...	Columbus
Knopf, Carl Lafayette.....	E. E.		109½	Columbus
Knox, Harry Smith.....	Eng.		41½	Akron
Koetitz, Walter Paul.....	Eng.		37	Tippecanoe
Kryder, Ernest R.....	Eng.		43½	Akron
Kuen, Carl Max.....	M. E.		110½	Baltimore, Md.
Kuenzel, Oscar.....	M. E.		120	New Bremen
Kundert, Samuel.....	Eng.		29½	Dayton
Kunkle, Fred Raymond, E. E.....			...	Bryan
Lafferty, William B.....	Eng.		...	Columbus
Lake, Lewis Joseph.....	C. E.		101½	Richwood
Lampert, John Martin.....	M. E.		155	Xenia
Landahl, Eugene Everett.....	E. M.		130½	Plain City
Lane, Ernest Garfield.....	Eng.		53½	Columbus
Larzelere, William Earl.....	Eng.		29½	Roseville
Laurencena, Miguel John.....	E. E.		104½	Parana, Argentine Republic
Lawson, John F.....	E. M. (S.)		38	Fairmont, W.Va.
Layman, Frank Edmund.....	Cer.		95½	Youngstown
Leavell, Harry Glenn.....	Eng.		35	Cook
Lee, Louis Robert.....	E. E.		88½	Kirtland
Leibold, Carl Peter.....	E. E.		170½	Columbus
Lewis, Charles G.....	Eng.		67½	Akron
Lewis, Charles James.....	Ind. Arts (S.)		22	Youngstown
Lewis, John Ernest.....	Ind. Arts (S.)		56	Jamestown, N.Y.
Lincoln, James Finney.....	Eng.		42	Painesville
Lindenberg, Leo.....	Eng.		71½	Arlington Heights
Lindsey, Hugh Kennedy.....	Eng.		29½	Middleport
Linxweiler, Otto, M. E.....			...	Dayton
Little, John Howard.....	E. E.		101½	Delaware
Lockwood, Allan Porter.....	Eng.		2½	Batavia
Lockwood, Howard Thomas.....	C. E.		144	Batavia
Lockwood, Reeme Witherby.....	Ind. Arts (S.)		63	Franklin
Loechler, Herman F.....	Eng.		39	Columbus
Long, George Garfield, E. M.....			...	Tippecanoe

Name.	Course	Course Hours	Credit Hours	Home Address
Lott, Cloyd.....	Eng.		2	Columbus
Lower, Weber Orlando.....	Eng.		14½	Chili
Lucas, Harry Nye.....	Eng.		55½	Washington C.H.
Lucero, Proquinto	Eng.		3	Mercedes San Luis, Arg. Rep.
Madden, Hugh.....	Chem.		51	Columbus
Maetzel, Paul Walter.....	Eng.		50½	Columbus
Makrides, Jeannes V.....	Eng.		...	Kerassunde, Turkey
Malone, George Eggleston.....	Chem.		50½	Dayton
Marker, James Reed.....	C. E.		138½	Versailles
Marquardt, William Benjamin.....	E. M.		177½	Dayton
Marshall, Charles Howard, M E.....	.....		...	Fair Haven
Marshall, Robert.....	Eng.		41½	Flint
Martin, Ray Morton.....	M. E.		155½	Richwood
Masjoan, Guan.....	Eng.		62	Parana, Arg.Rep.
Massey, Warner Cutler.....	Eng.		16½	Big Run, Pa.
Mattoon, Winford L.....	C. E.		120½	Plain City
Maurer, Oscar Valentine.....	Eng.		43½	Fostoria
Maxwell, Vernon Claypoole.....	E. E.		101½	Toledo
Maxwell, William Chase.....	M. E.		121	Syracuse, N. Y.
Meiklejohn, Robert.....	M. E.		174½	Columbus
Melick, Cyrus Alan, C. E.....	.....		...	Columbus
Mellinger, Aubrey H.....	E. E.		118½	Arcanum
Mendonca, Jose Gabriel.....	Eng.		43½	S. Paulo, Brazil
Menough, Paul Simpson.....	Eng.		55½	Wellsville
Mercer, Robert Wood, E. M.....	.....		...	Chester Hill
Merrill, Ferrand Seymour.....	C. E.		106½	Cincinnati
Merrill, Ralph Ozias.....	E. E.		90½	Ai
Metz, Ora Franklin.....	E. E.		126½	Norwood
Miller, Carl D.....	Eng.		45½	Columbus
Miller, Charles Addison.....	C. E.		101½	Mt. Vernon
Miller, Eugene Alpheus.....	M. E.		111	Akron
Mills, Nelson Anderson.....	Eng.		20	Columbus
Minns, Raymond Howard.....	Eng.		105½	Lodi
Minor, Wells Hammond, E. M.....	.....		...	Akron
Minton, Roy Himes.....	Cer.		159½	Covington
Monosmith, David Joseph.....	Eng.		49½	Spencer
Montgomery, John Rees.....	Eng.		50½	Columbus
Moon, Durand Besancon.....	Eng.		9½	Cleveland
Mooney, George Lewis, E. E.....	.....		...	Woodsfield
Moore, Frank Abram.....	M. E.		103½	Pleasant Corners
Morehouse, Wallace Wilber.....	C. E.		100½	Dayton
Moreton, David Penn.....	E. E.		108½	Moscow
Morey, Paul Campbell.....	E. E.		110	Hamilton
Morgan, Ralph Cochran.....	Eng.		38	Cadiz
Morlan, Wilbert, M. E.....	.....		...	Rogers
Morlock, Charles H.....	Eng.		44½	Fostoria
Morris, Willard Bernard, M. E.....	.....		...	Columbus
Morse, George Horace.....	Eng.		43½	Huron
Morse, William Clifford.....	Eng.		42½	Columbus
Muenster, Herman.....	Cer. (S.)		...	Columbus
Murdock, Carlisle.....	Eng.		25	Urbana
Murphy, Joseph Lincoln, C. E.....	.....		...	McArthur
Myers, Charles E.....	Eng.		13½	Alliance
McCann, William.....	Ind. Arts (S.)		19	Columbus
McCleary, Fred Elmer.....	Chem.		49½	Connorville
McComb, Hoyt Sherman.....	E. M.		141½	Columbus
McCorkle, Clayton Jerub.....	Arch.		101½	Warren
McCoy, Sturgeon.....	Eng.		9	Lancaster
McCoy, William Nelson.....	Eng.		44½	Roseville
McDorman, Paulin.....	Eng.		27½	Selma
McFarlane, William Arthur.....	Cer. (S.)		70	Bridgeport, Conn.
McGarey, Leo Sylvester.....	E. E.		168½	Junction City

Name.	Course	Hours	Credit	Home Address
McGarraugh, Robert Smith.....	E. E.		101½	Columbus
McGrath, Edward Hunter.....	Ind. Arts (S.)		3	Columbus
McGrath, Frank.....	Ind. Arts (S.)		36	Columbus
McGrew, Carl A.....	Arch.		100	Martins Ferry
McKee, Benjamin Franklin.....	Eng.		9½	Warren
McLaren, James Walter.....	M. E.		106½	Marietta
McLean, Arthur Tappen, jr.....	E. E.		107½	Greenfield
McMaster, Carlos Lenox.....	C. E.		136½	Columbus
McMillen, Harry.....	Cer. (S.)		45	Macomb, Illinois.
McMullin, Roy.....	E. E.		99½	Columbus
Nagel, Harry.....	E. E.		135	Wapakoneta
Nelson, Elbert James.....	Eng.		34½	Delaware
Nemeyer, Paul Matthias.....	Eng.		42	Findlay
Nesbitt, Charles Edward.....	Chem.		162½	Columbus
Nesbitt, Frederick Cookman.....	E. E.		149½	Columbus
Nesbitt, Ray Henderson.....	C. E.		101½	Akron
Nichols, Harry Birdsall, C. E.....			...	Painesville
Nold, Frederick B.....	E. M.		110½	Columbiana
Norris, George Bertrand.....	(Spl.		128	Ironton
Nye, Ralph D., E.E.....			...	Zanesville
Oeden, Carl Edward.....	Arch.		93	Miamisburg
Ogan, Mark.....	Cer. (S.)		141½	McArthur
Ogden, Ellsworth.....	Cer.		164½	Columbus
Ogihara, Tokujo.....	Chem. (Spl.)		80½	Tokio, Japan
Oman, Guy Samuel.....	Eng.		50½	Ashville
Orndorf, Earl Luther, Chem.....			...	Wauseon
Ossing, Percival F.....	Eng.		15	Columbus
Otterman, Jesse Lee.....	Eng.		27½	Layton, Pa.
Ozias, Clifford Wheatley.....	C. E.		77½	Columbus
Palm, Ormerod Heyworth.....	Cer. (Spl.)		...	Austin, Texas
Parker, Luther Albert.....	E. E.		71½	Hamilton
Parks, Clarence Chancy.....	Eng.		62½	Mt. Vernon
Patterson, Giffin G.....	Eng.		33	Blanchester
Patton, Paul C.....	E. M.		22	Sidney
Pavey, Vernon Frederick.....	E. E.		164½	Leesburg
Pearce, Wilbur Colton.....	Eng.		58½	Bellefontaine
Peirce, Raymond.....	M. E.		73½	Springfield
Peirce, William D.....	(Spl.)		16	Springfield
Pelton, Forrest Bertrum.....	E. E.		166½	Chagrin Falls
Peters, Herbert Zebulon.....	E. M.		82	Lancaster
Peterson, John William, Arch.....			...	Port Clinton
Pettitt, Harry Samuel.....	E. M.		98	Youngstown
Pew, William Harper.....	M. E.		90½	Youngstown
Pflueger, Edwin Bernard.....	C. E.		98½	Columbus
Pierce, Ernest.....	M. E.		122½	Lorain
Plodeck, Joseph.....	Eng.		...	Cleveland
Porter, Walter Stowe.....	Eng.		40½	Frankfort
Porterfield, John Calvin.....	Eng.		50½	Columbus
Poston, Burton Calvin.....	Cer.		49½	Logan
Poto, William L.....	Eng.		76½	Alliance
Potter, Ray.....	Eng.		½	Washington C.H.
Powell, Ivan Elno.....	E. E.		175½	Alliance
Prendergast, James.....	Eng.		40½	Columbus
Prince, George Wallace.....	E. M.		95	Pierpont
Probst, Carl Knight.....	Eng.		43	Columbus
Pruner, Harry P.....	Eng.		42½	Brookville
Ramsey, Ernest Cope.....	M. E.		81½	Columbus
Randall, David Austin.....	Eng.		2½	Columbus
Randall, James Edward.....	Cer. (S.)		37	Indianapolis, Ind.
Ranney, Archie Edward.....	Eng.		26½	Akron
Ray, Arthur William.....	Eng. (Spl.)		44½	Cleveland
Raynolds, Edwin Williams.....	Cer. (S.)		45	Columbus
Reed, Nathaniel Garfield, M. E.....			...	Youngstown
Rees, John Daniel.....	C. E.		54½	Oak Hill

Reif, Charles Caleb.....	Eng.	58½	Hamilton
Reynolds, John Neil.....	Eng.	44	Columbus
Rhoads, Charles Matthew.....	Eng.	23½	Columbus
Ribot, Antonio.....	E. E.	167½	San Juan, Porto Rico
Rice, Ray Howard.....	C. E.	161½	Corning
Richards, Arthur Rosser.....	Eng.	36	Alliance
Rickard, Everett Bernon.....	E. E.	92½	Columbus
Ricketts, Karl R.....	M. E.	47½	Columbus
Ricketts, William Corwin.....	E. E.	82½	Dayton
Riddile, John Scott.....	E. E.	174½	Barnesville
Ridenour, Lertin Washington.....	Eng.	41½	West Manchester
Riebel, Fred Earl.....	Eng.	17	Columbus
Rigdon, Carl.....	M. E.	109½	Wapakoneta
Ripsch, Charles William.....	Eng.	73½	Dayton
Ritchie, George Alexander, C. E.....	.....	.....	Hudson
Robinson, James Lee.....	Spl. (Short.)	59	Conesville
Robinson, Richard Walton.....	C. E.	109½	Whetstone
Rockhold, Cyrus Kimble.....	Eng.	55½	Bainbridge
Roller, Willard Leroy.....	Eng.	43½	Mendon
Rose, Claude Custer.....	M. E.	109½	Duval
Rosenblatt, Charles.....	Eng.	15	Cleveland
Ross, Calvin Burt, E. E.....	.....	.....	Urbana
Roy, James Watson.....	E. M. (S.)	81	Glen Roy
Royon, Edward Donald.....	M. E.	149½	Houston
Rupert, Jesse Solomon.....	E. E.	64½	New Waterford
Rush, Cecil Bertram.....	C. E.	87½	Mt. Vernon
Sample, Jared Irvin.....	Eng.	55½	Columbiana
Sanzenbacher, Walter Otto.....	C. E.	83½	Piqua
Sapp, Donna Louise.....	Arch (Spl.)	33	Columbus
Savage, Luke Francis.....	C. E.	35	McKeesport, Pa.
Sayers, Delbert Bancroft.....	E. M.	182	Marits
Schaaf, Downs.....	E. M.	110½	Columbus
Schertz, William Arthur.....	E. E.	157½	Hamilton
Schettler, Bruno.....	E. M.	73	Wellston
Schelling, Julius Henry.....	Eng.	55½	Columbus
Schlaflly, Roydon Karl, C. E.....	.....	.....	Mt. Eaton
Sloctemyer, Carl Fred, E. E.....	.....	.....	Cincinnati
Schott, Alvin Christian.....	Chem.	134	Massillon
Schott, Walter.....	Eng.	13	Millersburg
Schroeder, J. Albert.....	C. E.	81	Piqua
Schroth, Robert Charles, Jr.....	Eng.	49½	Columbus
Schubert, Charles Wesley, C. E.....	.....	.....	Columbus
Schultz, August Charles.....	C. E.	155½	Sandusky
Schultz, Lewis Adam.....	Eng.	22	Sandusky
Schupp, Peter.....	E. E.	90	Fostoria
Scott, James Lounsbery.....	Eng.	67½	Norwood
Scott, Leonard Leonidas.....	Ind.Arts (S.)	49	West Liberty
Scott, Walter Vance.....	Eng.	5	West Liberty
Sellers, Andrew Wilson.....	Ind. Arts (S.)	41	Marshall
Sellers, Russell M.....	Ind. Arts (S.)	47	Marshall
Seltzer, A. Frank.....	Eng.	4½	Shelby
Shank, Everett W.....	(Spl.)	.....	Liberty
Shapter, George Hoadley.....	E. E.	110½	Columbus
Sharp, Frederick M.....	Eng.	.....	Worthington
Shaw, Lucian.....	C. E.	174	West Lafayette
Sheldrick, Fred Ferdinand.....	E. E.	124½	Chatham
Shepard, Harvey Leonard, Chem.....	.....	.....	Cincinnati
Sherman, Sylvester Morrill, jr.....	C. E.	57	Columbus
Shinkle, Lee Hale.....	Eng.	34½	Higginsport
Shipps, Guy Lawhead.....	Eng.	38½	Zanesville
Shoemaker, Clifford.....	C. E.	100½	Grogan
Shumard, Orville R.....	Eng.	.....	Blanchester
Silfa, Belisario.....	E. M. (S.)	16	San Pedro de Marcoris, Santa Domingo
Sill, Edgar Townsend.....	E. E.	168½	Fostoria

Name.	Course	Course Hours	Credit Hours	Home Address
Simkins, Howard Dana.....	Eng.		2½	St. Marys
Simon, Trevor Burchfield.....	Eng. (Spl.)		38½	Cross Forks, Pa.
Singer, Lewis Parmelee.....	Cer. (Spl.)		175½	Lewisburg
Singleton, Fred.....	M. E.		137½	Columbus
Sinks, Walter H.....	Eng.		40½	Brookville
Slee, Norman Sylvester.....	Eng.		55½	Barberton
Small, James Bentley.....	E. M.		116	Columbus
Smith, Archie W.....	C. E.		146½	Martins Ferry
Smith, Blaine Robert.....	Cer. (S.)		...	Portland, Ore.
Smith, Carl Joseph.....	M. E.		116½	North Broadway
Smith, George Hagerty.....	E. M.		133½	Updegraff
Smith, Hubert Paul.....	M. E.		89	Pittsburg, Pa.
Smith, Roy Brooke.....	M. E.		174½	Columbus
Snodgrass, Franklin Chadwick.....	Eng.		55½	Elyria
Soler, Ysidro Brunet.....	C. E.		98½	Pinar del Rio, Cuba
Sosman, Robert Browning, Chem.....	.....		...	Chillicothe
Sparks, Virgil K.....	Eng.		19	Wellston
Speer, Carl Hall.....	M. E.		118	Hamilton
Sperry, Walter Asa.....	Chem.		83½	Columbus
Spitler, Grovey Otterbein.....	Chem.		95½	Van Buren
Stanton, Frederic Moses.....	Chem. (Spl.)		165½	Ridgeville
Stellhorn, Adolf, C. E.....	.....		...	Columbus
Stephens, Wesley McKeown.....	Eng.		9	Youngstown
Stephenson, Heber Hiram.....	Eng.		55½	Jackson
Stewart, Alton Leroy.....	E. E.		183½	Pindlay
Stewart, John Gilbert.....	Eng.		55½	Belle Center
Stewart, Robert Bentley.....	E. M. (S.)		71	Youngstown
Stewart, Selden Lewis.....	M. E.		140½	Struthers
Stewart, Walter Straight.....	E. M.		108½	Mannington, W. Va.
Stewart, William Thomas.....	C. E.		53½	Oxford
Stillwell, William Harris.....	M. E.		47½	Troy
Stokeley, Ray.....	E. E.		119½	Roseville
Strader, Joseph Edward.....	Eng.		17	Columbus
Strait, Ralph Howard.....	Eng.		36½	Zanesville
Strandburg, Charles J.....	E. M. (S.)		35	Jamestown, N. Y.
Straub, Albert A.....	Eng.		38½	Ironton
Strom, Lewis H.....	C. E.		106½	Hillsboro, N. D.
Sullivan, Frederick William.....	C. E.		66	Middletown
Swan, Earl G.....	Ind.Arts (S.)		57	Lima
Taggart, John Montgomery.....	Eng.		51	Donnelsville
Talbot, Edgar Carl.....	Eng.		18½	Columbus
Tansey, Howard Fred.....	Ind. Arts (S.)		126½	Franklin
Taylor, Frank Crites.....	Eng.		51½	New Philadelphia
Taylor, George Howard.....	Eng.		32½	Columbus
Taylor, Vance Elmer.....	Eng.		24	Urbana
Templin, John Richard, M. E.....	.....		...	Salem
Theobald, Adolf Otto.....	E. M. (S.)		89	Columbus
Thomas, Edward.....	Chem.		191½	Navarre
Thomas, Herbert Spencer.....	E. E.		79	Wheeling, W. Va.
Thomas, Ralph.....	Eng.		49½	New Madison
Thompson, Ezra John.....	C. E.		51	Kirtland
Tillman, John Henry.....	M. E.		92½	Columbus
Todd, Percy F.....	Eng.		55½	Piqua
Tresselt, Oswald Herman.....	Eng.		55½	Columbus
Trish, Henry Day.....	C. E.		96½	Nevada
Tucker, Harry Wallace.....	Ind. Arts (S.)		51	Shelby
Tudor, Glenn E.....	C. E.		68½	Chicago
Tusing, Grover.....	Eng.		4½	Brice
Ulery, Glenn Marvin.....	Eng.		83½	New Carlisle
Umberger, Kyle David.....	Ind. Arts (S.)		97	Wytheville, Va.
Vale, Chester Colton.....	Chem.		108½	New Carlisle
Vandenbark, Weldon Gorsuch.....	C. E.		83½	Zanesville

Name.	Course	Credit	Home Address
	Course Hours	Hours	
VanDorn, Horace Bishop, jr.....	E. E.	87½	Red Bank, N. J.
Van Hyning, Earl.....	Eng.	4½	Akron
Van Sciever, Fred Baumgartner.....	Eng.	36	Grove City
Van Tine, Charles Hovey, M. E.....	.....	...	Tiffin
Vaughn, Louis Fred.....	M. E.	56½	Cleveland
Vennum, George Carl.....	M. E.	98	Martins Ferry
Waddell, Benson Foraker.....	Eng.	50½	Columbus
Wagner, Arthur Julius.....	M. E.	103½	Hartwell
Waite, Horace Gayford.....	C. E.	67½	Oberlin
Walker, Downie R.....	M. E.	126	Hartwell
Walker, Herman.....	Eng.	32	Columbus
Walthour, Frederick Dale.....	Eng.	55½	Painesville
Ward, Kenneth Baker.....	C. E.	132½	Painesville
Ward, Samuel Edwin.....	M. E.	166½	Green Spring
Ward, Seymour Paul.....	Eng.	23½	Wickliffe
Ward, Vernon C., jr., M. E.....	.....	...	Columbus
Watson, Edgar Neil.....	E. E.	54	Lenox
Watson, William Gerard.....	Eng.	41½	Warren
Watt, Earl Blakemore.....	E. M.	88½	Barnesville
Watters, Burr Sells.....	M. E.	167½	Columbus
Way, Karl Martin.....	E. M.	86	Youngstown
Way, Leland Martin.....	Eng.	50½	Painesville
Weaver, George H.....	M. E.	107	St. Louisville
Webber, Frank Merrill, E. E.....	.....	...	West Richfield
Webber, W. Paul.....	(Spl.)	13	Columbus
Weinland, Herman Goodwin.....	M. E.	152	Springfield
Welch, Woodson Payne.....	Arch.	149½	Frankfort, Ky.
Weller, Orville Axline.....	Eng.	53½	Newark
Welliver, Marcus Edgar.....	C. E.	97½	Hamilton
Wells, Harry B.....	Cer. (S.)	94	Columbus
Wells, Paul Morley.....	Eng.	50½	Toledo
Wells, Wayne B.....	Eng.	55½	Wellsville
Welty, Albert B.....	Ind. Arts.	78½	Bluffton
White, Albert Corydon, jr.....	Eng.	40	Pepperell, Mass.
Wilcox, Carl Clifford, M. E.....	.....	...	Columbus
Wilcox, Miller Marble.....	C. E.	135½	Berea
Wiles, Arthur C.....	Eng.	22	Delaware
Wilford, Harold Albert.....	M. E.	92½	Jefferson
Wilkinson, Alan Dean.....	Eng.	55½	Columbus
Wilkinson, Clarence Moody.....	M. E.	137½	Columbus
Williams, Emrys Treharn.....	Eng.	51	Akron
Williams, Ernest D.....	M. E.	120½	Martins Ferry
Williams, Harry E.....	Ind. Arts (S.)	...	Lancaster, Pa.
Williams, Ralph DeWitt.....	Eng.	50½	Ashland
Williams, Samuel Byron, jr.....	E. E.	119½	Dayton
Wilson, Joseph Henry.....	E. E.	101½	Steubenville
Winans, Francis Marion.....	Arch.	42	Gallion
Wingard, Todd Albert.....	E. E.	115½	Columbus
Winger, Stanley DuBois.....	M. E.	185½	Springfield
Winsor, Leroy Everett.....	E. M.	88½	Berea
Wiper, John Clyde.....	Eng.	...	Macksburg
Wishart, James Benjamin.....	Eng.	34	Columbus
Wolfe, Arthur Clifton.....	M. E.	116½	Mt. Vernon
Wolfe, Ottis Lytton.....	Eng.	9	New Lexington
Wood, Paul J.....	E. E.	84	Rockport, Ind.
Work, William Roth.....	E. E.	130½	Springfield
Wyer, Samuel S., M. E.....	.....	...	Barberton
Wylie, Arthur Raymond.....	E. E.	127½	Reynoldsburg
Yeagle, William Austin.....	Eng.	55½	Clyde
Yost, Lloyd.....	(Spl.)	241	Somerset
Youmans, W. Raymond, E. E.....	.....	...	Pataskala
Young, Claude Burnett.....	Cer.	106	West Rushville
Young, Thomas Bruce.....	E. M. (S.)	94	Vandert't, Pa.
Yount, Barton Kyle.....	Eng.	37	Troy
Zeller, Howard P.....	Eng.	64½	Findlay

Name.	Course	Course Hours	Credit Hours	Home Address
Zuber, Leo Henry.....	Eng.		4	Columbus
Zuck, Emerson Samuel.....	E. E.		111½	Westerville
Zuest, Adolph, jr.....	Eng.		32	Cincinnati

COLLEGE OF LAW

GRADUATE STUDENTS—7

Amos, Frank Craig, LL. B.....	Columbus
Doud, Harry Lea, LL. B.....	Norwalk
Hummell, Edwin Ray.....	
Jones, Hanby Raymond, B. Ph., Otterbein University, LL. B.....	Columbus
Steinemann, George Charles, LL. B.....	Minster
Turner, Edward C., LL. B.....	Columbus
Worcester, Wood Frank, B. Ph., LL. B.....	Columbus

UNDERGRADUATES—159

Name.	Year.	Home Address.
Abt, Oscar M.....	Third	Canton
Ammon, Harry Delbert.....	Third	Potsdam
Armbruster, Edward B.....	First	Columbus
Armstrong Daniel Hinkle.....	Third	Jackson
Baker, Harry Daniel.....	Second	Newark
Barthelmeh, Charles J.....	Third	Baltic
Bates, Carl H.....	Second	Nelsonville
Bigelow, Bernard Barton.....	First	Findlay
Bigger, Matthew Leon, B. Sc.....	First	Tiffin
Blair, William Ariel, B. S.....	Second	Hillsboro
Bonnet, Alvin Cook.....	First	Columbus
Burkey, Charles Paul.....	Third	Pleasantville
Burr, Karl Edward.....	Third	Columbus
Campbell, William Goble.....	Third	Preston
Cheney, Ralph Lee.....	First	Blacklick
Choate, Robert R.....	First	Columbus
Clark, Carl Bertram.....	Second	Pine Grove
Connor, John R.....	Second	Columbus
Corkery, Thomas Jefferson, Jr.....	Second	Toledo
Daganhardt, John Vinton.....	First	Piqua
Davis, John Wellington.....	Third	Ohlstown
Davis, Thomas Charles.....	First	East Greenville
Day, Ralph W.....	First	Columbus
Delay, Frank.....	First	Jackson
Dietz, Clayton Rudolph.....	Third	Trenton
Dinsmore, Chester LeRoy, B. Ph.....	First	New Athens
Dodd, John A.....	First	Circleville
Dolson, Benjamin Reimmund.....	First	Lancaster
Doty, Boyd Patterson.....	Third	Lexington
Downing, John Leedam.....	First	Toledo
DuBois, David B.....	Third	Bellaire
Dury, Francis B.....	First	Columbus
Duval, Marshall Ney.....	Third	Steubenville
Eagleson, John Hervey, B. A.....	Second	Columbus
Eagleson, Joseph Pentecost, B. A.....	Third	Columbus
Elder, Walter Newell.....	First	Selma
Foster, Ralph Akin.....	First	Columbus

Name.	Year.	Home Address.
Frankham, Charles R., B. A.....	Second	Westerville
Frebis, Frank Xavier.....	Second	Ripley
Freshour, William McDowell, A. B.....	Third	Piqua
Game, Francis Harvey.....	Second	Canal Winchester
Gardner, Howard Julius.....	Third	Kent
Godown, Harry Clayton.....	Third	Hilliards
Gurney, Rexford R.....	Third	Mansfield
Hagenbuch, George Edwin.....	First	Urbana
Hahn, George Philip.....	First	Napoleon
Hardinger, Johnson Edgar Daniel.....	First	Middleport
Harrison, William Waddington.....	Second	Scio
Headley, Sanford Alfonso.....	First	Jacksonville
Hempstead, David King.....	Third	Wilmingon
Hinkle, Lester E.....	Third	DeGraff
Hoppes, George Lewis.....	Second	Eher
Hornbeck, Frank H.....	First	Williamsport
Hornbeck, Roscoe G.....	Second	London
Hosler, William E.....	Third	Laureville
Housel, William J.....	Second	Columbus
Humphrey, Oliver Perry.....	Third	Glenmont
Hunt, Jay H.....	Third	Columbus
Hunter, Robbins	Third	Newark
Huston, George Enos.....	Third	Millersburg
Johnston, Robert Royal.....	Third	Marietta
Jones, Cecil V.....	First	St. Paris
Jones, Daniel C., B Ph.....	First	Jackson
Jones, Gustavus A.....	First	Robinson, Illinois
Jones, Thomas S.....	First	Yorkville
Juniper, Charles Walter.....	Second	Nelsonville
Kerr, Floyd Ellis.....	Second	Tippecanoe City
Kinder, Gordon Donald, B. Ph.....	Second	Ottawa
Kirn, Edward George.....	Second	Lancaster
Kline, Hubert Merle, B. A.....	First	Dayton
Kohr, Paul Homer.....	Second	Columbus
Kreighbaum, Herbert S.....	Third	Canton
Lambert, Elza J.....	Third	Plantsville
Lang, Thomas W.....	Second	Findlay
Laylin, Clarence Dewey.....	First	Norwalk
Leeper, Charles Foster.....	Third	Marietta
Lisle, Thomas G.....	Second	Columbus
Longbrake, Arthur Garfield.....	Third	Belle Center
Loughrey, John Lerison.....	Second	Marysville
Luse, James Herbert.....	First	Sandusky
Lutton, Wilbur B.....	First	Ashtabula
Madden, Ernest C.....	Third	Columbus
Marshall, Logan Walker.....	First	Sidney
Martin, Franklin Ewing.....	First	Columbus
Martin, William Kookon.....	First	Lancaster
Maxwell, Earl Frederick.....	Third	Xenia
Meek, Edward Duncan.....	Third	Glencoe
Midgley, James A.....	First	Mechanicsburg
Miesse, Frank H.....	First	Chillicothe
Mills, Don P.....	First	Norwalk
Moloney, William Patrick.....	Third	Codding
Montgomery, Charles Wesley, A. B.....	Second	Newark
Moore, Lyman Gooderl.....	Third	Quaker City
McAllister, Earl Saddler, B. Ph.....	First	Columbus
McBride, Joseph	First	Columbus
McDermott, Frank, A. B.....	Third	Stockport
McDermott, Robert B.....	Third	Coshocton
McGirr, William	Second	Columbus
Nash, Simeon	Second	Zanesville
Newton, Wilmer P.....	First	Lowell
Oblinger, Gates Charles, Jr.....	First	Dayton
O'Brien, Charles Francis.....	First	Urbana
Ogan, Servitus W.....	First	Columbus Grove

Name.	Year.	Home Address.
Oldham, Jay Leslie.....	Second	Springfield
Oldham, John	Second	Sidney
Outhwaite, Charles P., B. A.....	First	Columbus
Overturf, Alva Kendall.....	First	Columbus
Page, Walter, Jr.....	Third	Columbus
Parsons, George M.....	Second	Columbus
Porter, Clyde C.....	Third	Tiffin
Powell, Oscar H. W.....	Third	New Vienna
Ragan, Eleanor Virginia.....	Third	Napoleon
Rankin, Harry W.....	First	Washington C. H.
Raudabaugh, Orville.....	Second	Celina
Rexroth, Raymond Clark.....	First	Bucyrus
Rice, Clarence Stahl.....	Third	Springfield
Riddle, Abner E.....	Third	Columbus
Rowe, William Curtis.....	Second	Staunton
Ruth, Frank E.....	Second	Columbus
Scarlett, Henry Lancelot.....	Third	Columbus
Schneider, Earnest True.....	Second	Dayton
Shannon, Francis William James.....	Second	Columbus
Sharp, Stephen Albert.....	Third	Columbus
Sherman, Thomas M., B. Sc.....	Third	Columbus
Shoemaker, William Allen.....	Third	Zanesville
Shotwell, Abel Vail.....	First	Marengo
Smith, Philotus M.....	Third	Egypt
Spurrier, Emery Allen.....	Third	Chesterhill
Starkey, Neil	Third	Zanesville
Stephenson, Robert Winthrop.....	Second	Mansfield
Stewart, George Francis.....	Second	Coshocton
Stewart, Gilbert Holland, Jr.....	Third	Columbus
Strayer, Jesse Elisha.....	First	De Graff
Swallow, Clarence W.....	Second	Springfield
Swan, Frederick	Second	Marietta
Tallmadge, Harold Hedges.....	First	Columbus
Taylor, Edward George.....	Third	Kenton
Taylor, Roy C.....	Second	Washington C. H.
Thomas, Emmett Price.....	Third	Kent
Thomas, Herbert Spencer.....	Second	Wheeling, W. Va.
Thompson, Francis M.....	First	Dayton
Treash, Philip Burdell, Ph. B.....	Third	Akron
Van Horne, William Earl.....	First	Franklin
Van Ness, W. Philip.....	First	Mechanicsburg
Voorhees, William Doyle.....	Third	Scio
Walsh, George E.....	Third	Columbus
Waltmire, George C.....	Second	Deshler
Wander, Charles Benjamin.....	Second	Mt. Vernon
Ward, Asa Everett, B. A.....	First	Marietta
Weber, Alonzo Christian.....	Third	Lewisville
Wheeler, Ralph Harold.....	Third	Canton
White, Cassius O.....	First	Montpelier
Wilkins, Philip L.....	First	Danville
Williams, Louis Boyer.....	Second	Dayton
Willis, Roche Carl.....	First	Columbus
Wilson, Charles R.....	Third	Circleville
Wolf, Benjamin Jacob.....	Second	Gnadenhutten
Woods, William Burroughs.....	First	Garrettsville
Young, Carl Houseman.....	First	Columbus

COLLEGE OF PHARMACY

UNDERGRADUATES—40.

Name.	Course	Course Hours	Credit Hours	Home Address
Ackerman, Graham Burt.....	Long	...	156½	Columbus
Ashinger, William E.....	Short	...	10	Upshur
Atkinson, Harry Churchill.....	Long	...	97½	Pataskala
Atkinson, Joseph Barnard.....	Long	...	129½	Pataskala
Beatty, Hugh Gibson.....	Short	...	59	Washington, C. H.
Beeler, Clyde S.....	Short	...	118	Hamilton
Bodman, Edgar Sereno.....	Long	...	152½	Bement, Illinois
Boenan, Victor.....	Short	...	40	Shelby
Bolenbaugh, Albert.....	Short	...	63	Canal Winchester
Chaney, Lee F.....	Short	...	63	Pricetown
Dickerson, Archie H.....	Long	...	139½	Louisville, Ky.
Dysart, Nelson C.....	Short	...	67	Reynoldsburg
Gaier, Anton, Jr.....	Short	...	15	Springfield
Glick, Bert Philip.....	Short	...	51	Ashville
Gregory, Carl Louis.....	Long	...	46½	Geneva
Harrington, Edward Winslow.....	Short	...	30	Columbus
Henderson, Herbert B.....	Special	...	80	Laceyville
Hidden, Harry Stuart.....	Long	...	88	Madisonville
Johnson, Columbus.....	Short	...	114	Louisville, Ky.
Jones, Benjamin Evans.....	Short	...	77	Jackson
Jones, Robert Earl.....	Long	...	66½	Newark
Keel, Claud D.....	Short	...	31	Bucyrus
Koehl, Philip Pearl.....	Short	...	53	St. Marys
Miller, Pearl Nelson.....	Short	...	7	Toledo
McClure, Clarence Minor.....	Short	...	54	Hillsboro
McKenzie, Glenn Howard.....	Short	...	23	Columbus
Nutt, Owen Herbert.....	Short	...	89	Beaver
Ramsower, Harry Clifford.....	Long	...	48½	Granville
Roseman, John.....	Short	...	5	Youngstown
Sallady, Waltz Sumner.....	Short	...	51	Derwent
Sauerbrun, Otto Orville.....	Short	...	36	Shelby
Schuler, Louis.....	Short	...	54	Ross
Shearer, Roy.....	Long	...	...	McZena
Smith, Mabel Elsie.....	Short	...	59	Columbus
Surface, Henry Earl.....	Long	...	48½	West Liberty
Tanner, Ray Elliott.....	Short	...	27	New Concord
Welzbacher, Frank J.....	Short	...	...	...
Whitacre, William M.....	Short	...	54	Springfield
Winter, Carl.....	Short	...	73	Youngstown
Yates, Harrison Sechrist.....	Short	...	11	Columbus

COLLEGE OF VETERINARY MEDICINE

GRADUATE STUDENTS—1.

Lamb, Morgan Baxter, 1901, D. V. M.....Barlow

UNDERGRADUATES—93

Name.	Course Hours	Credit Hours	Home Address
Adams, Willard Gilcrest.....	...	64	Akron
Anders, Thomas Olin, D. V. M.....	Fremont
Atherton, William Thomas.....	...	138	Carrollton
Atkins, Peyton D.....	...	105½	Hallsville
Bard, J. Eldoras.....	...	114	Sodom
Barthalow, Henry Barry.....	...	54	Fairmont, W. Va.
Bauman, Ernest Henry.....	...	117	Dundee Lake, N. J.
Baver, Alvin Franklin.....	...	109	Krumsville, Pa.
Bay, Charles.....	Cambridge
Bender, John Ellis, D. V. M.....	Louisville
Boggs, Howard Shannon.....	...	137½	Kingston
Breckenridge, William Kemper.....	...	213	Watertown
Breinig, Chester A.....	Jersey
Brobeck, Ivan J.....	...	109	La Rue
Bullock, Alfred Davis.....	...	115	Milwaukee, Wis
Burke, Edgar Lee.....	...	114	Bethel
Butcher, James Clyde.....	...	112	Wapakoneta
Carril, Pedro Leon del, D. V. M.....	San Juan, S. Am.
Carver, Rolly Jay.....	...	64	Leipsic
Case, Aubrey Edmund.....	...	73	Hudson
Case, Claude Henry.....	...	139	Hudson
Chapman, Don C.....	...	19	Westerville
Choate, John Wesley, V. S.....	Columbus
Churchman, Moris Harper.....	...	129	Jerome
Cook, George Edward, D. V. M.....	Tedrow
Daughtrey, George Hoadley.....	...	64	Sabina
Dennis, Vernon Alva.....	...	44	Tedrow
Dilts, Charles Ray.....	...	95	Thornville
Dock, Norton, D. V. M.....	Cincinnati
Fitzgerald, Albert D.....	...	64	Old Fort
Francis, Reed Kilgore.....	...	54	Hilliards
Funes, Tomas L.....	...	133	Buenos Ayres, Ar-
Gousebatt, Luis.....	...	131½	gentine Republic
			Entre Rios, Arg. R.
Goss, Leonard Whittlesy.....	...	64	Edinburg
Grace, William Albert.....	...	46	Columbus
Heacock, Clyde Clark, V. S.....	Beloit
Herrold, Charles Hoyt.....	...	109	Starr
Holm, Robert Edwin.....	...	122	Welshfield
Huffman, Ward T.....	...	64	Williams Center
Ihaney, Eduardo Benedicto.....	...	121½	Catamarca, A. Rep.
Imler, Fern Arthur.....	...	3½	Leistville
Inderrieden, Joseph Henry.....	...	24	Loramie
Johnston, Carl Arthur.....	...	115	Akron
Johnston, Theodore Charlemagne, V.S.....	Barlow
Langdon, Elmer.....	...	173	Sabina
Laughlin, Horace Wade.....	...	109	Belle Center

Name.	Course Hours	Credit Hours	Home Address
Linebaugh, Edward C.....	...	20	Millersburg
Lipp, Charles Clinton, D. V. M.....	New Middletown
Lipp, George Arthur.....	...	116	New Middletown
Mallow, Harry Campbell.....	...	169	Washington, C. H.
Marquardt, Samuel Jacob.....	...	114	Monroeville, Ind.
Marsteller, Ross Perry.....	...	64	Republic
Maynard, Lee	100	Ross
Meiche, Louis Hayes, V. S.....	North Royalton
Michael Victor	114	Farmersville
Moreno, Regino Teodora, D. V. M.....	Corrientes, A. Rep.
Musser, Robert Claude.....	...	119	Buckland
McDaniel, Elmer	20	Richwood
Newton, Howard M.....	...	65½	Ashville
Oden, George W.....	...	120	Akron
O'Harra, Joseph B.....	Columbus
Oliver, Robert Evin.....	...	132	Chillicothe
Peabody, Horace Clare.....	...	48	Webster, S. Dakota
Pettiford, Orley	8	Kenton
Pickens, Roy	Belmore
Pierce, Floyd Andrews.....
Pinkerton, Harry Edgar.....	...	64	Washington, C. H.
Planz, John	115	Akron
Porter, Frederick William.....	...	112	Augusta, Georgia
Prahl, John	32	Akron
Ralston, Wyatt Elgin.....	...	117	Findlay
Redhead, William H.....	...	117	Glenville
Reynolds, Howard Capwell.....	...	115	Factoryville, Pa.
Reynolds, Leo DeWitt.....	...	49	Madison
Richards, Harry Julius.....	Columbus
Riddell, Theodore Wellington.....	...	64	Columbus
Rietz, John Harrison, D. V. M.....	Gilmore
Rigdon, Frank	64	Wapakoneta
Rigdon, Scott J.....	...	64	Columbus
Schaeffer, Nicholas L.....	...	13	Fleetwod, Pa.
Schaffter, William Albert.....	...	64	Wooster
Shepard, Henry Glen.....	...	85	Sulphur Grove
Skidmore, Don T.....	...	114	West Mansfield
Smith, Howard Ellenwood.....	...	64	Dunham
Sola, Ernesto	141	Salta, Arg. Rep.
Springer, Samuel Elza.....	...	111	Lakefork
Thromer, John Dudley.....	...	85	Mayhew, Miss.
Townsend, Franklin E.....
Turner, Clayton Hedges.....	Ross
Washburn, Leo	64	Greenwich
Way, Lynn J.....	...	116	Youngstown
Worthington, William D.....	...	114	Pleasant Corners
Yule, Charles Compton.....	...	9	Leipsic

LAKE LABORATORY STUDENTS—Summer 1902.

Edith Minerva Brace....	{ B. S. Univ. of Nebraska }	.....	Rochester, N. Y.
Harold Griswold Burr, A. B.....	{ M. S. Univ. of Chicago }	.....	Worthington
Mary Burr			Worthington
Leon J. Cole, A. B. Univ. of Michigan.....			Ann Arbor, Mich.
Melville Thurston Cook {	A. B. Ieland Stanford Univ. }	.....	Greencastle, Ind.
	A. M. De Pauw Univ. }		
Fredericka Detmers, B. Sc., M. Sc.....			Columbus
Maud Flynn, B. Sc.....			Columbus
J. W. Foreman, B. S. De Pauw Univ.....			Charleston, Ill.
Gertrude Fay Harvey, B. A. Univ. of Cincinnati.....			Bond Hill
Ruth Sawyer Harvey.....			Bond Hill
William Pearce Holt, A. B. Oberlin College.....			Geneva
Robert Linton Hyde.....			Clarksburg
Walter Charles Metz.....			Newark
E. L. Morris, A. M. Amherst College.....			Monson, Mass.
May Withrow Morse.....			London
Edwin Lincoln Moseley, A. M. Univ. of Michigan.....			Sandusky
Minnie E. Porter.....			New Philadelphia
Modesto Quiroga.....			San Luis, Argentine Republic
William Robert Rhoads, A. B. Otterbein.....			Fostoria
Lumina Cotton Riddle, B. Sc., M. Sc.....			Columbus
Ernest Roller, B. Sc. De Pauw University.....			Greencastle, Ind.
Otto Herman Swezey {	A. B. Lake Forest Univ. }	.....	Rockford, Ill.
	M. Sc. Northwestern Univ. }		
William Edward Wells....	{ B. Ph. Iowa College }	.....	Granville
	{ M. S. Denison Univ. }		
Harlan H. York.....			Cartersburg, Indiana

GENERAL SUMMARY

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE—	
Undergraduates	243
	243
COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE—	
Graduate Students	38
Undergraduates	490
	528
COLLEGE OF ENGINEERING—	
Undergraduates	662
	662
COLLEGE OF LAW.....	166
COLLEGE OF PHARMACY.....	40
COLLEGE OF VETERINARY MEDICINE.....	94
LAKE LABORATORY, SUMMER 1902....	24
Total	1,757
Names counted twice	22
Net total	1,735

SUMMARY BY COUNTIES

Adams	2	Hamilton	24	Noble	3
Allen	10	Hancock	14	Ottawa	2
Ashland	14	Hardin	7	Perry	10
Ashtabula	13	Harrison	8	Pickaway	12
Athens	5	Henry	7	Pike	6
Auglaize	15	Highland	12	Portage	8
Belmont	15	Hocking	4	Preble	11
Brown	4	Holmes	5	Putnam	8
Butler	25	Huron	8	Richland	13
Carroll	6	Jackson	19	Ross	27
Champaign	17	Jefferson	11	Sandusky	6
Clark	22	Knox	15	Scioto	3
Clermont	8	Lake	15	Seneca	9
Clinton	18	Lawrence	7	Shelby	9
Columbiana	20	Licking	33	Stark	18
Coshocton	14	Logan	18	Summit	25
Crawford	11	Lorain	12	Trumbull	11
Cuyahoga	27	Lucas	13	Tuscarawas	15
Darke	8	Madison	21	Union	21
Defiance	1	Mahoning	29	Van Wert	2
Delaware	11	Marion	3	Vinton	3
Erie	10	Medina	12	Warren	14
Fairfield	20	Meigs	8	Washington	11
Franklin	524	Mercer	3	Wayne	10
Fulton	6	Miami	28	Williams	8
Gallia	3	Monroe	5	Wood	4
Geauga	3	Montgomery	48	Wyandot	3
Greene	19	Morgan	14		
Guernsey	8	Morrow	9		
		Muskingum	25		

SUMMARY BY STATES AND COUNTRIES

Argentina Republic	11	Japan	1	Oregon	1
Brazil	1	Kentucky	6	Pennsylvania	21
Bulgaria	1	Maryland	3	Porto Rico	1
California	1	Massachusetts	3	Roumania	1
Canada	1	Michigan	2	South Dakota	1
Connecticut	2	Minnesota	1	Santa Domingo	7
Cuba	2	Mississippi	1	Texas	1
District of Columbia	2	Missouri	2	Turkey	1
Florida	1	Nebraska	1	Utah	1
Georgia	1	New Jersey	5	Virginia	1
Illinois	9	New York	13	West Virginia	12
Indiana	14	North Dakota	1	Wisconsin	2
		Ohio	1585		

GRADUATES

GRADUATES

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor if any alumnus who changes his residence will notify the Executive office of his new address and occupation. They will also be grateful for any information from any source that may assist in making or keeping the Directory of the Alumni complete and correct.

ALUMNI ASSOCIATION

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EDWIN E. SPARKS, '84, Chicago.....	<i>President</i>
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WM. H. PAGE, '92, Columbus.....	<i>Alternate</i>

COMMITTEE ON NECROLOGY

BERTHA SCOTT, '90, Columbus.....	Term expires 1904
CARL G. DONEY, '91, Columbus.....	" 1905
E. S. T. SCHAUB, '85, Columbus.....	" 1906

OHIO STATE UNIVERSITY ASSOCIATION OF NEW YORK

H. E. PAYNE, '87.....	<i>President</i>
256 Broadway.	
A. E. SELLENINGS, '96.....	<i>Secretary</i>
102 East Thirty-first street.	
GEO. N. COLE, '91.....	<i>Treasurer</i>
265 Broadway.	

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E. W. HARVEY, '96.....	

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JOHN F. CUNNINGHAM, '96.....	<i>Secretary-Treasurer</i>
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HARRY LEVISON, Toledo.....	<i>President</i>
F. E. CALKINS, Toledo.....	<i>Vice-President</i>
GALES ABEL RAYMOND, Toledo.....	<i>Secretary and Treasurer</i>

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LUCIUS A. HINE, '88.....	<i>President</i>
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JAMES G. SKINNER.....	<i>Vice-President</i>
CHARLES W. SHEPHERD, '00.....	<i>Secretary</i>
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URLAH H. MYERS, '87.....	<i>President</i>
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C. F. MARVIN, '83.....	<i>President</i>
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W. R. BEATTIE, '94.....	<i>Secretary</i>
Conduit Road.	
A. F. MCCALL, '00.....	<i>Lantern Correspondent</i>

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DR. W. S. SCOTT.....	<i>Vice-President</i>
HOMER JORDAN.....	<i>Secretary</i>
LYLE S. EVANS, '01.....	<i>Treasurer</i>

DIRECTORY

A

- Abbott, Arthur Grant, 1889, B. Sc. (Agr.) Wadsworth, Dairy Farmer.
Abbott, Royal A., 1900, B. Ph., M. A., 1902, Instructor, Ann Arbor, Mich., 804 Monroe street.
Ackerman, Eli Osborn, 1884, C. E., Station B, Columbus, Engineer Maintenance of Way Columbus Street Railway Co.
Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.
Adams, Elizabeth Jane, 1903, B. A., Columbus.
Addison, Arthur Everett, 1895, B. Ph., 1900, LL. B., Columbus, teacher East High School.
Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.
Addison, Clarence Maywood, 1896, B. Ph., 1900, LL. B., Columbus, 145 King avenue.
Aglar, Eulalia, 1895, G. Ph. (Mrs. Whitford), Columbus, with Columbus Pharmaceutical Company.
Albert, Louisa Mary, 1895, B. A. (Ohio Wesleyan University), 1896, G. Ph., Mrs. A. E. Vinson, Columbus.
Aldrich, Chester H., 1888, B. A., LL. B., David City, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Moscow Idaho, Vice-President and Manager Moscow Electric Light and Power Company.
Alexander, St. Clair, 1893, M. E. in EE., stock yards, Kansas City, Mo.
Alexander, Charles P., 1896, M. E. in EE., Canton, O., District Manager Northwestern Mutual Life Insurance Company.
Allaman, William Ernest, 1896, G. Ph., Columbus, M. D. O. M. U., 1902, interne Protestant Hospital.
Allen, Edward Harrison, B. A. (Harvard), 1899, LL. B., Lena.
Allen, Lucy, 1897, B. A., 1900, M. A. (Mrs. George Smart), 854 Hough avenue, Cleveland, O.
Alsdorf, Percy Reed, E. M., Central City, Col., Standard Assay Office.
Alsdorf, Frederick Charles, 1892, E. M., Clifton, Ariz., Superintendent Stevens Copper Company.
Alspach, Rufus Edwin, 1897, M. A. (B. A. Heidelberg), Thornville.
Alyord, Justus Elvin, 1901, LL. B., Toledo.
Ames, Edward Holiday, 1903, C. E., Columbus.
Amos, Frank Craig, 1901, LL. B., Columbus, attorney-at-law.
Anders, Thomas Olin, 1903, D. V. M., Fremont.
Anderson, James T., 1884, B. A., Colorado Springs, Col., First Lieutenant U. S. Army.
Anderson, Newton, M., 1898, B. Sc., Asheville, N. C.
Andress, Edna A., 1900, B. Ph. (Mrs. Julius Stone), Arlington Heights, O.
Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S. Ohio Wesleyan University), Zanesville.
Andrews, Catherine E., B. A. (Wellesley College), 1903, M. A., assistant in chemistry, State University, Columbus.
Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.
Armstrong, Clara, 1901, B. Sc. (Dom. Sci.), Columbus, 298 King avenue.
Armstrong, Daniel Hinkle, 1903, LL. B., Jackson.
Armstrong, Edna, 1897, B. Ph., Columbus.
Armstrong, William H., 1890, G. Ph., Marysville, druggist.
Arnold, Charles Lincoln, 1890, B. Sc., 1894, M. Sc., West Eighth avenue, Columbus, assistant professor in mathematics, State University.
Arnold, Edwin E., 1898, M. E. Westinghouse Machine Company, E. Pittsburg, Pa.
Atkins, G. Glenn, 1888, B. A., Burlington, Vt., Congregational minister.
Atkinson, Warren, 1899, M. E., Maintenance Department New York Telephone Company, Brooklyn, N. Y.

- Auld, James A., 1897, M. E. in EE., Columbus, with D. S. Auld, 76 East Gay street.
 Austin, John Gustave, 1899, LL. B., Toledo.

B

- Bachtell, Nellie May, 1895, B. A.
 Backhaus, Henry Ward, 1894, B. A., Wapakoneta, cashier, People's National Bank.
 Baer, Philip, Jr., 1897, B. Sc. (Agr.), Canal Dover, Dairy Farmer.
 Bagley, Anna Gertrude, 1894, G. Ph., Columbus, with the Kauffman-Lattimer Co.
 Bailey, Ervin George, 1903, M. E., Damascus.
 Baker, James Burt, 1898, LL. B., Ph. M. (Mt. Hope College), Salem.
 Baker, John Ezra, 1897, B. A., 1898, LL. B., Chicago, Ill.
 Baker, William Hollister, 1892, B. Agr., Trenton, Mo., R. R. No. 3, stock farmer.
 Baldwin, Elizabeth Grant, 1899, B. Ph., Columbus.
 Baldwin, Zoa Belle, 1896, B. A. (Mrs. George Gugle), Columbus.
 Ball, Danforth Ewers, 1901, B. Sc., Fellow in Astronomy, State University, Columbus.
 Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus.
 Ball, Ernestine Faye, 1903, B. A., Columbus, 565 East Broad street.
 Ball, Fred S., 1888, B. Ph., Montgomery, Ala., First National Bank Building, attorney-at-law.
 Bancroft, Gay, 1898, B. A., Columbus, 26 West Gay street.
 Barcus, Eliza D., 1900, B. A., Schenectady, N. Y.
 Barcus, Miner, 1897, M. E. in EE., Schenectady, N. Y., with General Electric Company.
 Barlow, Helen M., 1898, B. Ph., Columbus.
 Barlow, Moses Henry, 1901, C. E., Civil Engineer Dayton Coal and Iron Company.
 Barnaby, Charles L., 1898, C. E., Zanesville, engineer's office C. & M. V. Ry., acting assistant engineer.
 Barnaby, Josephine, 1896, B. Ph., teacher, East Cleveland, assistant principal in East Cleveland High School.
 Barringer, Lawrence Eugene, E. M., General Electric Company, Schenectady, N. Y., Research Department.
 Barrows, Harry Holbrooke, 1898, C. E., Assistant Engineer Alabama Great Southern Ry.
 Barry, William John, 1903, C. E., New Straitsville.
 *Bartholomew, Clyde Stanley, 1896, C. E., died June 23rd, 1900.
 Basterdes, Ada Mabel, 1890, B. Ph., Mankato, Minn., 509 South Broad street.
 Bates, Albert Harlan, 1892, LL. B., M. E. (Lehigh University), Cleveland, O.
 *Bates, Josephine M., 1881 (Mrs. Florizel Smith), died ———, 1900.
 Bates, Wesley C., 1882, LL. B., 35½ North High street, Columbus, attorney.
 Baughman, George W., 1897, G. Ph., Springfield, pharmacist.
 Beach, David Price, 1895, C. E., Wellsville, Pennsylvania Railroad Assistant Engineer Corps.
 Beach, Margaret Alice, 1891, B. Ph. (Mrs. Wilson Holman), Bayonne, N. J.
 Beach, Robert Kellogg, 1890, B. Ph., Cleveland, O., editor.
 Beal, Edwin George, A. B. (O. W. U.), LL. B., 1902, Bucyrus.
 Beale, Harry Glenn, 1902, B. Sc., Mt. Sterling, farmer and breeder of Duroc Jerseys.
 Beardsley, Orsamus D., 1898, B. Ph., Chicago, Ill., 4527 Ellis avenue.
 Beattie, William Renick, 1894, B. Sc., 1897, M. Sc. (in Horticulture), Washington, D. C., U. S. Department of Agriculture, Bureau of Plant Industry, Assistant in Botany.
 Beck, Arthur Andrew, 1893, C. E., Columbus, 329 South Ohio avenue, Deputy County Surveyor, 31 Board of Trade.
 Beer, James Anderson, 1903, B. Sc., Ashland.
 Belden, Herbert Lucius, 1902, B. Sc., Washington, D. C., Bureau of Soils, U. S. Department of Agriculture, soil agent and expert.
 Belden, Sanford Bonner, 1895, E. M., Manager Pittsburg Office Jeffrey Manufacturing Company.
 Bell, Florence Louise, 1900, B. Ph., Columbus, 832 East Town street.
 Bell, Mary Edith, 1894, B. Ph., teacher in Central High School, Columbus.

- Bellows, Gertrude Halm, 1902, B. Ph., Columbus, 325 East Town street, Assistant Registrar O. S. U.
- Beman, Lamar Taney, A. B. (Western Reserve), 1902, M. A., Cleveland, O., 29 McConnell street.
- Bender, John Ellis, 1903, D. V. M., Louisville.
- Bennett, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill., attorney-at-law.
- Bennett, Samuel E., 1890, D. V. M., 44 Kirby street, Boston, Mass.
- Bentley, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College), 15 Miller road, Shanghai, China, missionary.
- Bertsch, Joseph Franz, 1896, LL. B., Columbus, 124 West Ninth avenue.
- Bibbee, George E., 1897, LL. B. (A. B. Ohio Wesleyan University), Columbus, 111½ South High street, attorney.
- Biebl, Andrew J., 1903, B. Sc., Gilbon, Minn.
- Biebel, Herman Matthews, 1896, M. E. in EE., Chicago, Ill., electrical engineer, with Western Electric Company, designing electrical engineer.
- Bigelow, Bernard Barton, 1903, B. Ph., Findlay.
- Bischoff, John Wallace, 1899, E. M., Robertsdale, Pa., Superintendent Rockhill Iron and Coal Company.
- Bissing, William, 1893, M. E. in EE. (A. B. Johns Hopkins University), New York City, 49 Wall street, patent law.
- Bittner, William Pitt, B. Ph., 1902, Sandusky, O., care Journal and Local.
- Blackburn, Frank H., 1896, M. E. in EE., Fostoria, electrical engineer, Fostoria Incandescent Lamp Company.
- Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.
- Blakiston, Anna Houston, 1897, B. Ph. (Mrs. Powell), Pittsburg, Pa.
- Blakiston, Mary, 1893, B. Ph., Columbus, The Normandie (Mrs. Wellington Guild).
- Bleining, Albert Victor, 1901, B. Sc., chemistry instructor in Ceramics, State University, Columbus.
- Blinn, Ray S., 1893, B. S.
- *Bloom, Edwin M., 1893, B. Sc., died 1894.
- Bloom, J. George, 1889, C. E., division engineer B. & O. Ry., New Castle, Pa., 217 Garfield street.
- Bloomfield, Lloyd Morris, 1891, B. Agr., Paso del Cura, Vera Cruz, Mexico, Manager La Esmeralda Plantation.
- Bock, Harrison W., 1898, LL. B., 1899, B. Ph., attorney, Pittsburg, Pa., 520 Frick Building.
- Bock, Theodore Emil, 1901, LL. B., Hamilton, O.
- Bockius, Harry Graham, Ph. B. (Yale University), 1899, LL. B., 52 Broadway, New York, N. Y.
- Bodman, Mary E., 1898, B. Ph., Bement, Ill.
- Boehme, Adolphus Joe, 1901, M. E., Youngstown, 109 Wood street, Cleveland, Youngstown & Pittsburg R. R.
- Boesche, Felix John, 1896, G. Ph., Denver, Col.
- Boesel, Frank Tilden, 1896, B. Ph., LL. B. (Harvard), Milwaukee, Wis., 198 West Water street, attorney.
- Bogue, Ernest Everett, 1894, B. Sc., H. & F., 1896, M. Sc., Professor of Forestry, Michigan Agricultural College.
- Bohn, Frank A., 1900, B. Ph., 1901, M. A., Fellow in History, University of Michigan, Ann Arbor, Mich.
- Bohn, William Edward, B. A. (German Wallace College), 1900, M. A., Instructor, 1020 University avenue, Ann Arbor, Mich.
- Bomesberger, Walter Nelson, 1903, E. M., Columbiana.
- Bond, Charles Grosvenor, 1899, LL. B., New York City, with N. Y. Life Insurance Company.
- Bone, John H., 1893, B. Sc., 1896, B. Sc. (Agr.), Shadeland, Ind., farmer.
- Bonnet, Alvin Cook, 1903, B. A., Columbus, 550 East Town street.
- Booth, Carl Howard, 1903, B. Ph., Columbus.
- Booth, Cora Vrooman, 1903, B. Ph., Columbus.
- Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D.
- Boothman, Dale Maxwell, 1903, M. E., Bryan.
- Bope, George W., 1897, LL. B., Columbus, 275 East State street, attorney-at-law.

- Bostwick, Homer Z., 1900, B. A., 1902, LL. B., Columbus.
 Bostwick, Oliver Newton, 1902, C. E., Civil Engineer B. & O. Ry., Newark, O.
 Bott, George Robert, 1901, M. E., Columbus, 1038 Hunter street, Mech. Eng. Case Manufacturing Company.
 Bowden, Harry W., 1900, C. E., Mt. Vernon, 201 West Vine street, draftsman Mt. Vernon Bridge Company.
 Bower, Jerome G., 1897, M. E., Pressed Steel Car Company, Chicago, Ill.
 Bowles, John Porter, 1902, B. Ph., Columbus.
 Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, Professor of Inorganic Geology, State University.
 Boyd, Emma, 1888, B. Ph., Dennison avenue, Columbus, teacher in the North High School.
 Boyd, James Ellsworth, 1891, B. Sc., Columbus, Associate Professor of Mathematics, State University.
 *Boyd, James G., 1897, D. V. M., died 1900.
 Boyd, Martin L., 1897, LL. B., B. Ph. (Scio College), Columbus, 265 East Eleventh avenue.
 Bradford, Ernst, 1892, G. Ph., Columbus, chemist and superintendent The Pioneer Stove Works.
 Bradford, Frances Elizabeth, 1903, B. Ph., Columbus, 29 South Garfield avenue.
 Bradford, Joseph Nelson, 1883, M. E., 54 West Tenth avenue, Columbus, Professor of Architecture and Drawing, State University.
 *Brand, Harry Frank, 1896, B. Ph., 1896, LL. B., died 1903.
 Brandt, James Herbert, 1899, B. A., Greencastle.
 Brandt, Ulysses Sherman, 1895, B. A., teacher E. High School, Columbus.
 Brannan, Thomas Hays, 1903, C. E., Columbus.
 Brashear, Edward Rosemond, 1903, C. E., Columbus.
 Bratton, Alice, 1901, B. Sc. (Dom. Sci.), Columbus, 1309 Neil avenue, teacher of Dom. Sci., Industrial School.
 Braun, Joseph G., 1897, G. Ph., Columbus, 802 South Champion avenue, pharmacist.
 Brelsford, Harley, 1898, B. Ph., Christianburg.
 Brewer, Charles Reed, LL. B., Columbus.
 Brewer, John Whitney, 1896, G. Ph., Columbus, 126 West Tompkins street, pharmacist, with W. C. Wendt.
 Bridge, Effie Irene, 1903, B. A., Columbus.
 Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary surgeon.
 Bright, Frederick I., 1900, LL. B., Logan.
 Britton, John Carr, 1898, B. Sc. (Agr.), Washington, D. C., Bureau of Soils, U. S. Department of Agriculture.
 Bronson, Herman S., 1897, LL. B. (B. L., Cornell University), Columbus, attorney, 120 Wilson avenue.
 Brooks, Herbert Barton, 1903, M. E. in EE., Piqua.
 Brooks, Stanley Grange, 1901, B. Sc., Columbus, traveling salesman for D. L. Auld.
 Brophy, James Francis, 1899, E. M., Frostburg, Md.
 Brown, Albert Marion, 1901, B. Ph., Wauseon.
 Brown, Frank, 1899, M. A. (A. B., Macalester College), teacher in High School, Ravenwood, Ill.
 Brown, Frederick W., 1888, E. M., Florence, Col., consulting chemist and accountant for The Portland Cement Company.
 Brown, Harry Wilbur, 1902, D. V. M., Columbus.
 Brown, John Quincy, 1901, M. E., Oakland, Cal., Assistant General Manager and Engineer Oakland Transit Company, Assistant General Manager and Engineer San Francisco, Oakland & San Jose R. R.
 Brown, Newton H., 1893, M. E. in EE., Newark, Del., General Manager Rapid Transit Company, Chattanooga, Tenn.
 Brown, William Craig (A. B., University of Wooster, 1902, LL. B., Mt. Pleasant.
 Bruce, Charles A., 1895, B. A., Columbus, Associate Professor of Romance Languages, State University.
 Brugger, Harvey, 1903, B. Sc., Clyde.
 Brumley, Daniel, 1895, C. E., Elizabethtown, Ky.
 Bruning, Henry Dietrick, 1896, C. E., Columbus, 768 Oak street, instructor in civil engineering, O. S. U.
 Bryant, William Cheney, 1902, B. Ph., Columbus.

- Buchenburg, Alvin E., 1900, M. E. in EE., Wauseon, O., consulting engineer.
 Buckman, Arthur Leslie, 1897, M. E. in EE., Toledo, 637 Oakwood avenue, superintendent of equipment, Home Telephone Company.
 Buckman, Ola., 1895, B. Sc. (M. D., Cleveland University of Medicine and Surgery), Norwalk.
 Bunnell, Larone A., 1898, G. Ph., pharmacist with I. H. B. White, Winchester, Indiana.
 Burgess, James Henry, 1900, B. Ph., Sheridan, Wyo.
 Burkett, Charles William, 1895, B. Sc. (Agr.), 1898, M. Sc. (Agr.), professor of agriculture, North Carolina College of Agriculture and Mechanic Arts, West Raleigh, N. C.
 Burkett, Dora Van Buren, 1897, B. Ph., Columbus.
 Burkey, Charles Paul, 1903, LL. B., Pleasantville.
 Burnett, Whittier, 1903, B. Ph., Waynesville.
 Burns, James Ferguson, 1891, C. E., Lebanon, Ky., roadmaster L. & N. Ry.
 Burr, Harriet G., 1897, B. A., M. A., 1903, Worthington, Fellow in Botany, O. S. U.
 Burr, Karl Edward, B. A. (Princeton, 1900), 1903, LL. B., Columbus.
 Butcher, Frederick Eric, 1901, B. Ph., with Jeffrey Mfg. Co., Columbus.
 Butler, Blanche Woodruff, 1901, B. A., teacher in High School, Wellsville.
 Butler, James Marion, 1894, LL. B. (A. B., Ohio Wesleyan University), Columbus.
 Butterworth, William H., 1898, B. A., Columbus, 45 North Seventeenth street.
 Bygate, Harry Goldsmith, 1899, M. E., New Kensington, Pa., Pittsburg Reduction Company.
 Byers, Clara, 1894, B. Ph. (Mrs. Coles A. Raymond), Toledo, O.

C

- Cahen, Alfred, 1894, LL. B., Allegheny, Pa.
 Calkins, George Herbert, 1895, M. E. in EE., production clerk General Electric Company, Schenectady, N. Y., 906 Union street.
 Calkins, William Bartlett, 1898, G. Ph., Denver, Col., chemist Denver Gas and Electric Company.
 Callender, Sherman D., Ph. B. (Oberlin College), 1898, LL. B., Hartsgrove, O.
 Calvin, Anthony B. (A. B., Northeastern Ohio Normal), 1900, LL. B., Youngstown, 1904 Market street.
 Cameron, Harry Ezra, 1901, C. E., structural draughtsman, McClintic Marshall Construction Company, Rankin, Pa.
 Canaga, George Orlando, 1895, LL. B. (Scio College), B. A., Scio, O.
 Canfield, Charles H., 1897, D. V. M., Indianapolis, Ind., government meat inspector.
 Canfield, Dorothea Frances, 1899, B. Ph., graduate student, Columbia University, New York City.
 Canfield, Leander Randall, 1896, B. Ph., Chardon.
 Cannon, Anna Cathrine, 1901, B. Ph., Columbus.
 Capron, Marshall Fremont, 1888, M. E., chief mechanical engineer, Seamless Steel Tube Company, Detroit, Mich.
 Carpenter, Jessie Marie, 1903, B. Ph., Columbus, 1251 Bryden road.
 Carr, Hugh Stanley, 1896, M. E. in EE., Chicago, Ill., 823 Manhattan Building, engineer, The American Carbolite Company.
 Carr, James Gray, 1897, B. A., Coshocton.
 Carril, Pedro Leon del, 1903, D. V. M., San Juan, Argentine Republic.
 Carroll, Patrick Henry, 1894, E. M., Herrin, Ill., superintendent Big Muddy Coal and Iron Company.
 Carroll, William Hunt, 1894, LL. B., A. M. (Havenford College, Pa.), Wilmington.
 Carson, Eleanor Eliza, 1902, B. Ph., Delaware.
 Carson, Samuel George, Ph. B. (Hiram College, 1901, LL. B.), Lordstown.
 Carson, Samuel King, 1895, M. E. in EE., M. D. (Ohio Medical University), Acting Assistant Surgeon, U. S. A., Manila, P. I.
 Cartzdafner, Roy Edwin, 1903, M. E., London.
 Cary, Charles R., 1900, LL. B. Millersburg.
 Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant.
 *Catlin, Homer Clark, 1896, C. E., died March 10, 1902.

- Cartwright, Henry Gilroy, 1895, LL. B., Wilmington, O.
 Cavanaugh, Andrew F., 1900, M. E., draftsman, Stillwell-Bierce and Smith-Vail Company, Dayton, O.
 Cavin, Frank Thomas, 1902, E. E., Schenectady, N. Y., General Electric Co.
 Cellarius, Frederick Julius, 1888, C. E., Dayton, assistant city engineer.
 Chamberlain, Helena W., 1884, B. A. (Mrs. Ellis Lovejoy), Union Furnace.
 Chamberlain, Robert Marcus, 1901, B. Sc., Youngstown, O., 866 Mahoning avenue.
 Chalmers, Agnes Florida, 1895, B. Ph.
 Chappell, Walter Evans, 1898, M. E. in EE., Manchester, England, 55 Molyneux street, with British Westinghouse Electric and Manufacturing Company, Trafford Park, Manchester.
 Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.
 Chaney, James William, 1902, B. Ph., New Holland, O., Box No. 317.
 Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician, 109 South Third street.
 Cilley, Raymond, 1896, M. E., Brooklyn, N. Y., 1190 Forty-fourth street, chief draftsman, The Graham-Fox Motor Company.
 Clagett, Arthur E., 1903, B. Ph., Dayton.
 Clapp, Katharine B., 1902, B. Ph., Norwalk, O.
 Clark, Alexander B., A. B. (Yale University), 1899, LL. B., Canton.
 Clark, Clarence J., 1899, C. E., draftsman, engineer's office, City Hall, Columbus.
 Clark, Herman Alfred, 1902, B. Sc. (H. and F.), Department of Agriculture, Washington, D. C., Bureau of Soils, tobacco expert.
 Clarke, James Ulrick, 1902, M. E., Lancaster, O., superintendent Lancaster Traction Company.
 Clawson, Clarence Alfred, 1899, B. Sc. (Agr.), 1900, D. V. M., assistant inspector, B. of A. T., U. S. Department of Agriculture, Trinidad, Col., Box 525.
 Clawson, Lucy Blanche, 1903, B. Sc. (Dom. Sci.), Okeana.
 Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.
 Claypoole, Bessie Smith, 1895, B. Ph., Columbus, Neil avenue.
 Claypoole, Charlotte Lake, 1892, B. Ph., Columbus, Neil avenue.
 Clements, Frank Orville, 1899, M. Sc. (M. A., Otterbein University), Altoona, Pa., assistant chemist, Pennsylvania, R. R.
 Clevenger, Charles Henry, 1902, B. Sc., Fletcher, O.
 Clevenger, Joseph Franklin, 1903, B. Sc., Fletcher.
 Clum, George V., 1893, B. A., Earlville, Ill.
 Clum, Harry Ernest, 1899, B. Ph., 1901, LL. B., Columbus.
 Cockerill, Orville Porter, 1902, B. Ph., teacher of science, High School, Washington C. H.
 Cockins, Edith D., 1894, B. A., Columbus, registrar, State University.
 Coddington, Edwin F., 1896, C. E., 1897, M. Sc., Ph. D., 1902 (University of Berlin), Columbus, 39 West Eleventh avenue, Assistant Professor of Mathematics, O. S. U.
 Cole, George Nathan, 1891, M. E. in EE., 265 Broadway, New York, contractor railroad supplies.
 Cole, Marietta C., 1897, B. Ph., Columbus, South Eighteenth street.
 Collins, Curtis, 1895, M. E. in EE., Consulting Engineer and EE for S. A. Luz Electrica & Rio Plata Electric Co., San Juan, Puerto Rico. Box No. 244
 *Collins, Walter Scott, 1901, B. A., died—1902.
 Cone, John Charles, 1903, B. Ph., Hamilton.
 Coney, William Hawks, 1894., B. Sc., Honolulu, S. I.
 Conley, Clyde Grayson, 1902, C. E., Mt. Vernon Bridge Co., Draftsman—Mt. Vernon.
 Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German, 433½ Long street.
 Connell, William A., 1886, E. M., Secretary Va. Manganese Iron & Coal Co., Kansas City, Mo.
 Connolley, Augusts, 1902, B. Ph., Columbus, O.
 Connor, Alice M., 1900, B. Ph., Columbus, 44 McMillan avenue.
 Connor, Ellen J., 1900, B. Ph., 1901, M. A.
 Conrad, Louis Verne, 1902, C. E., P. C. C. & St. L. Ry., assistant on Engineer Corps, Logansport Division, Logansport Ind.
 Conradi, Albert Frederick, 1901, B. Sc. (Agr.), Durham, N. H., Instructor in Zoology and Entomology, N. H. State College.

- Cone, J. P., prin. of H. S., Millersburg, O.
- Converse, Edward Jasper, 1886, B. A. (B. D., Yale University), Columbus, assistant pastor, First Congregational Church, 808 North High street.
- Converse, Howard Pendleton, 1887, B. Sc., Boston, Mass., 8 Oliver street. "H. P. Converse & Co."—Contractors & Engineers, Iron & Steel.
- Converse, Walter, 1899, B. A., Plain City.
- Conway, Hugh Lawrence, 1896, C. E., Ass't. City Engineer, City Hall, Cincinnati, 524 East Fourth street.
- Cook, George Edward, 1903, D. V. M., Tedrow.
- Cook, Spencer Nye, 1903, E. M., Chillicothe.
- Coover, Winfred Forrest, B. A. (Otterbein University), 1903, M. A., Dayton.
- Cope, Albert N., 1897, M. E. in EE., Columbus, assistant engineer construction, Columbus Street R. R.
- Corner, Edith Carlisle, 1901, B. Ph., Columbus, 642 East Rich street.
- Corner, Florence, 1897, B. Ph. (Mrs. Albert Sellenings), New York City.
- Corns, Harry, 1887, B. A., Columbus, teacher in Central High School.
- Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law, 1462 Neil avenue.
- Cosley, Harvey Harter, 1901, C. E., Illinois Steel Co., Draftsman at North Works, Chicago, Ill., 501 LaSalle avenue.
- Cotes, Albert E., 1896, B. Sc., Columbus, medical student Ohio Medical University.
- Coursault, Ida May, 1899, B. Ph., Columbus, 770 East Long street.
- Coursault, Jesse H., 1893, B. A., 1898, M. A., Columbus, teacher in Central High School.
- Courtright, Elizabeth Pauline, 1901, B. A., (Mrs. Frank S. Knox), Grays Flat, W. Va.
- Courtright, J. Loring, 1900, B. A., M. D. (Starling Medical College, 1903), Columbus—Mt. Carmel Hospital.
- Courtright, Stella Van, 1901, B. Ph., Columbus.
- Covell, Vernon Royce, 1895, C. E., Wilkinsburg, Pa., 512 South avenue.
- Coy, William Stacey, 1903, B. A., Columbus.
- Crabb, James Byrl, 1903, B. Sc. (Agr.), Mt. Sterling.
- Crabbe, Arthur, 1901, C. E., Dayton, O., 137 East Third street. Resident Engineer, Great Northern Construction Company.
- *Crabbe, George, E. M., 1902, Columbus, O.—died August, 1902.
- Craig, Moses, 1889, B. Sc. (M. S., Cornell University, 1890), 1896, M. Sc. (H. F.), Michigan Agricultural College, special student in Horticulture.
- Cratty, John Mason, 1897, B. Sc., Norfolk, W. Va. Chemist, U. S. Navy Yard.
- Crawford, Mary, 1901, B. Sc. (Dom. Sci.), Blaine.
- Crawford, Ira Jr., 1893, LL. B. (B. S., Dennison University), Dayton.
- Crawford, William Sterling, 1888, B. Ph.
- Croll, Alfred J. (A. B., Ohio Normal University), 1900, LL. B., Toledo, O.
- Cromley, Alva M., 1897, G. Ph., Long street and Washington avenue, Columbus, Pharmacist.
- Crooks, Charles Melvis, 1892, B. A. (B. D., Harvard University, 1896), Colerain, Mass., pastor Congregational church.
- Crowner, Delbert Alonzo, 1896, B. Sc. (Agr.), Instructor in Buttermaking, Ohio State University. West Jefferson
- Cummins, Henry Rollins, 1891, G. Ph., pharmacist Lake View Hospital, Cleveland O.
- Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, book-keeper.
- Cunningham, Charles Gilman, 1901, B. Ph., Toledo.
- Cunningham, Edward Walker, 1894, C. E., Pittsburg Bridge Works, Pittsburg, Pa., 231 Mathilda street.
- Cunningham, George S., 1886, B. Ph., LL. B., Lancaster, Attorney-at-law.
- Cunningham, John Ferguson, 1897, B. Sc. (H. & F.), 1899, M. Sc. (H. & F.), Cleveland, editor "Ohio Farmer." 366 Marce street.
- Curran, Bernard Franklin, LL. B., 1901, 15 North Fourth street, Zanesville.
- Curtis, Curtis Cicero, 1902, LL. B., Columbus, O.
- Curtis, Leigh Goodrich, 1899, C. E., Assistant Division Engineer, Chicago Division, Garrett, Ind., B. & O. R. R.

D.

- Daily, Henry G., 1892, D. V. M., Wooster, veterinary surgeon.
- Daily, John Randolph, 1899, LL. B., Centerburg.

*Dead.

- Damron, Carson W., 1897, M. E., chief draftsman Wagner-Palmros Manufacturing Co., Fairmont, W. Va., 812 Gaston avenue.
- Daniels, David Edwin, 1893, LL. B., B. Ph., Denison University, 1896, LL. M., Columbus, 1326 Madison avenue.
- Dann, Walter M., 1902, M. E., Westinghouse E. & M. Co., Wilksburg, Pa., 1106 Center street.
- Darby, Roscoe B., 1900, LL. B., Wauseon.
- Davenport, Adrian E., 1897, B. A., Columbus, 220 Miller avenue.
- Davidson, David Millen, 1894, B. A.
- Davidson, George Edwin, 1899, LL. B., East Liverpool.
- Davidson, Ruth Emily, 1903, B. Ph., Chicago, Ill.
- Davidson, David Millen, 1894, B. A.
- Davies, Jennie C., 1897, B. Ph., Columbus, 590 East Spring street
- Davies, John Lodwick, 1894, LL. B., Columbus.
- Davis, Charles William, 1894, E. M., Colorado Springs, Col., care J. Mck. Ferridy & Co., general mining business.
- Davis, Oscar Allen, 1897, M. E. in EE., Alliance, Mechanical Engineer, The Reeves Bros. Co.
- Davis, Vernon Hays, 1900, B. Sc. (Agr.), M. S. A. (Cornell, 1901), Columbus, Assistant Professor of Horticulture and Forestry, State University.
- Day, Albert Edward, 1902, B. Sc., Mt. Carmel O. Dairy Farmer.
- Deahl, Walter Smith, 1896, C. E., 268 Fisk street, Pittsburg, Pa., Pittsburg Bridge Co., Draftsman, Bridge Department Bureau of Construction, City Hall.
- Deardurff, Carl Mason, 1895, B. A.
- DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.
- DeLoffre, Andre, 1896, M. E. in EE., London, Eng., General Electric Co., of Schnectady N. Y.
- DeLoffre, Samuel Middleton, 1895, B. A.
- Dennis, Jerry, 1892, LL. B., 1893, LL. M., B. Sc. (National Normal), Columbus, attorney-at-law, 690 Franklin avenue.
- Denny, Charles Wampler, 1901, M. E. in EE., New York, N. Y., 510 West Twenty-third street. Experimental Work. Cooper-Hewitt Electrical Co.
- Derby, Alice Greenwood, 1901, B. Ph., Columbus, 93 East Fifteenth avenue.
- Derby, Florence Harlow, 1896, B. Ph., 1901, B. Sc. (Dom Sci.), Columbus, (Mrs. Charles E. Haigler), 161 West Eleventh avenue.
- Detmers, Frederica, 1887, B. Sc., 1891, M. Sc., 1315 Neil avenue, Columbus, teacher.
- Devol, William Stowe, 1886, B. Agr., Redlands, Cal., newspaper reporter.
- De Wolf, Roger Dennison, 1901, M. E. in EE., Westinghouse Electric Co., 508 Rebecca street, Wilksburg, Pa.
- Dice, Jesse Peck, 1898, LL. B., Akron.
- Dickinson, George Codwice, 1901, B. A., Circleville.
- Dickinson, Thomas Herbert, 1899, B. Ph., Assistant Professor of Rhetoric and English Language, O. S. U.
- Diemer, Hugo, 1896, M. E. in EE., Associate Professor in Mechanical Engineering, University of Kansas, Lawrence, Kan.
- Dietrich, Charles Henry, 1878, B. Sc., Lexington, Ky., American Book Company.
- Dietrich, George C., 1898, B. Ph., Sandusky, Principal of High School.
- Dill, Dille Augusta, 1900, B. Ph., Columbus.
- Dill, Raymond, 1901, M. E. in EE., Westinghouse Electric & Mfg. Co., Wilksburg, Pa., 923 South street.
- Ditto, Theodore Walter, 1903, B. Sc. (Agr.), Delphos.
- Doan, Frank C., 1898, B. Ph., Athens, Professor of Philosophy, Ohio University.
- Dock, Norton, 1903, D. V. M., Cincinnati.
- Dollison, Harvey C., 1900, B. Sc., Columbus.
- Dolson, Benjamin Reinmund, 1903, B. Ph., Lancaster.
- Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Ph. D., 1902, Columbus, pastor King Ave. M. E. Church, 388 West Sixth avenue.
- Donham, Maurice, 1896, M. E., Warren, Pa., General Manager Jacobson Machine Manufacturing Co.
- *Donham, William W., 1882, B. Sc., died Feb. 10, 1898.
- Donovan, Dennis Aloysius, 1902, B. Ph., Columbus, O.
- Doty, Boyd Patterson, 1903, LL. B., Lexington.
- Doud, Harry Lee, 1901, LL. B., 1903, LL. M., Columbus, "The Dennison."
- Dowd, Charles F., 1900, B. Ph., Toledo, 1028 Virginia street.

- Dresbach, Mary, 1901, B. Sc. (Dom. Sci.), Columbus, (Mrs. Joseph Clevenger).
 Dresbach, Melvin, 1897, B. Sc., Columbus, 236 West Eighth avenue, Instructor in Anatomy and Physiology, O. S. U.
 Drummond, William G., 1900, M. E., Gallipolis, O. Mechanical Engineer Ohio Hospital for Epileptics.
 Du Bois, David Douglass, B. S. (Muskingum College), 1903, LL. B., Bellaire.
 Dubois, Wilbur L., 1900, B. Sc., 1902, M. A., chemist in the Bureau of Chemistry, Washington, D. C., 1213 Q street, N. W.
 Dun, George William, 1884, B. Sc., Columbus, business manager "Columbus Citizen."
 Dun, John J., 1883, E. M., Fifteenth avenue, Columbus, N. W. corner Gay and High. Real estate.
 *Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.
 Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.
 Dunlap, Thaddeus Cox, 1895, M. E. in EE., manager Columbus Pneumatic Tool Co., Columbus, O.
 Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.
 Dunlap, Robert R., 1900, M. E. in EE., Columbus, O., 272 North Seventeenth street. Elect. Eng'r. Jeffrey Mfg. Co.
 Dunnick, Edward, 1897, C. E., draftsman, Mt. Vernon Bridge Co., Mt. Vernon, O.
 Durbin Samuel Clyde, 1901, B. Ph., New Cumberland, W. Va.
 Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta, U. S. Department Agriculture.
 Dye, Clair Albert, 1891, G. Ph., Assistant Professor of Pharmacy, State University, Columbus, 169 King avenue.
 Dyer, Werter Clarkson, 1903, B. A., Plano.

E.

- Eagleson, Grace, 1897, B. Ph., Columbus, 84 North Ohio avenue.
 Eagleson, John H., 1900, B. A., LL. B., 1903, Columbus, 84 North Ohio avenue.
 Eagleson, Joseph P., 1900, B. A., LL. B., 1903, Columbus, 84 North Ohio avenue.
 Early, Franklin E., 1893, D. V. M.
 Easterday, Charles Todd, 1891, G. Ph., Wellston, druggist, with Harrison & McGhee.
 Eastman, Katherine, 1903, B. Ph., Columbus.
 Easton, Ernest Doane, 1902, B. Sc., Springboro, O.
 Eckhardt, Carl Conrad, 1902, B. Ph., Columbia, Mo., Assistant in History, University of Missouri.
 Edwards, Mary Winifreda, 1897, B. A., New Richmond, Prin. of High School.
 Egbert, Knott C., 1890, B. Agr., M. S. (Cornell, 1901), Yainax, Oregon, Superintendent Indian School.
 Eisenbise, Bertha, 1900, B. Ph., Columbus, Monroe avenue.
 Eisenlohr, Berthold A., 1898, B. Ph., Instructor in German Language and Literature, Ohio State University, Columbus, 377 King avenue.
 Ellis, Charles, 1899, D. V. M., 3230 Locust street, St. Louis, Mo., veterinarian to Board of Health.
 Emery, Peyton Randolph, 1893, LL. B., London.
 Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Lancaster, New Hampshire, pastor Unitarian church.
 Emswiler, John Edward, 1903, M. E., Utica.
 Erf, Oscar, 1899, B. Sc. (Agr.), Champaign, Ill., instructor in Dairying, University of Illinois.
 Erskine, John H., 1886, E. M., M. D., physician and surgeon, Albany, Ore.
 Estep, Frank Leslie, 1898, M. E. in EE., foreman Copper Rolling Mill Bridgeport Brass Co., Bridgeport, Conn.
 Evans, Ernest, 1892, B. Sc., Zanesville, O., National Steel Co.
 Evans, Lyle Sanford, A. B. (Miami University), LL. B., 1901, Chillicothe, O.
 Evans, Peter Platter, 1892, C. E., contracting engineer, The Osborn Engineering Co., Osborn Bldg., Cleveland, O.
 Evans, Thomas Daniel, 1902, LL. B., New York City. Student in Dramatic School.
 Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., graduate student University of Chicago, Ill.
 Ewalt, Clara Converse, 1901, B. Ph., 1903, M. A., Columbus, 70 Buttles avenue, Fellow in Rhetoric, Ohio State University.

*Dead.

Eysenbach, Ernest E., 1896, E. M., St. Paul, Minnesota, Supt. St. Paul Gas Light Co.
Eysenbach, Louis, 1903, C. E., Delphos.

F.

Fairchild, Harmon Scott, 1894, LL. B., Springfield.
Farber, Charles Harker, 1894, B. A., Columbus, with State Savings Association.
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., instructor in Climatology, Johns Hopkins University.
*Fay, Frederick Willis, 1882, B. A., B. Arch., died August, 1892.
Fay, Mona, 1897, B. Ph. (Mrs. Eugene Gee), San Francisco, Cal., 1106 Van Ness avenue.
Feicht, Russell Stimson, 1890, M. E. in EE., Engineering Department Westinghouse E. & M. Co., Pittsburg, Pa., 732 North Euclid avenue.
Feiel, Ida Louise, 1898, B. Ph., Columbus, 520 East Main street.
Fenner, Jesse Albertus, A. B. (Wittenberg College), 1898, LL. B., Cleveland, O.
Fergus, Guy Carlton, 1898, M. E. in EE., partner in Zanesville Electrical Co.
Fergus, John Franklin, 1892, LL. B., Columbus, attorney-at-law.
Ferguson, Ollie Wayman, 1903, B. Sc. (Agr.), Columbus.
Fickes, Walter M., 1900, E. M. (Ceramics), manager Rosslyn Brick Co., Carnegie, Pa.
Finley, Harry Marshall, 1894, B. A., McConnellsville, principal of High School.
Fippin, Elmer Otterbein, B. Sc. (Agr.), Washington, D. C., Department of Agriculture, Bureau of Soils, Field Assistant in U. S. Survey.
Fischer, Paul, 1891, B. Agr., D. V. M., Columbus, O., Station "A," R. R. No. 2., State Veterinarian.
Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898, B. Sc., Wilmington, Delaware, chemist of Krebs Pigment and Chemical Co.
Fischer, Walter, B. Sc., Columbus, Madison avenue.
Fish, Fred Alan, 1898, M. E. in EE., Assistant Professor Electrical Engineering, State University, Columbus, 41 Hubbard avenue.
Fisher, Clara, 1896, B. A. (Mrs. J. Porter Milligan), Columbus, 1108 Dennison avenue.
Fisher, Georgietta, 1895, B. A., Columbus, (Mrs. Cassius C. Corner), 642 East Rich street.
Fisher, Ida May, 1900, B. Ph., Columbus, East Rich street, O. S. U. library.
Fitzgibbon, James Robert, 1894, LL. B., B. L. (Notre Dame), Newark.
Fitterer, John Conrad, 1898, B. Sc., Bucyrus.
Flickinger, George A., 1898, B. Sc. (Agr.), Knoxville, Tenn., R. R. No. 7, Dairy Farmer and Gardener.
Floto, Julius, 1889, E. M., St. Louis Mo., 909 Euclid avenue. Agent Brown-Ketcham Iron Works of Indianapolis, Indiana.
*Flynn, Benjamin H., 1898, C. E., died March 1st, 1903.
Flynn, Harry Franklin, 1892, C. E., Washington, D. C., U. S. Geodetic and Coast Survey.
Flynn, Maud, 1896, B. Sc., Columbus, student, 40 East Fifth avenue.
Flynn, Oscar Rodgers, 1896, B. Sc., 5802 Jackson avenue, Chicago, Ill.
Foley, William J., 1894, D. V. M., Lexington, Ky.
Follin, Florin Atwood, 1894, LL. B., Darlington, O.
Ford, Nile Otis, A. B., M. Sc. (Washington and Jefferson), 1901, E. M., engineer Lakouta Gold Mining and Reduction Co., Mill City, South Dakota.
Ford, Ruth L., 1898, B. A. (Mrs. Lorenzo Carlisle), Ashtabula, O.
Ford, Stanley Hamer, 1898, B. Ph., First Lieutenant in U. S. Army, stationed at Army Post in Oklahoma.
*Forgy, Ralph Morris, 1896, B. Ph., died March, 1899.
Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning.
Foster, Frank McMillan, 1894, M. E. in EE., Cincinnati, O., 805 Mt. Hope avenue, Secretary and Treasurer American Valve & Meter Co., 1125 Gest street.
Foster, Israel Moore, 1898, LL. B., B. Ph. (Ohio University), Athens.
Foster, Vance, 1903, E. M., Higby.
Foulk, Charles William, 1894, B. A., Associate Professor Chemistry, State University, Columbus, 1656 Neil avenue.
Fowler, Harry R., 1894, M. E. in EE., Toledo electrical contractor.

- Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Diamond Rubber Co., Akron, O.
 Fox, Frederick Hugh, 1896, B. Ph., McConnellsville.
 Fox, John Herbert, 1897, M. E., Cleveland, 100 Hough avenue, Brown Hoisting Machine Co., mechanical engineer.
 Fox, Ross G., 1900, B. Ph., Columbus, 983 North High street.
 Frame, Rollo St. Clair, 1901, C. E., Silver City, New Mexico, civil engineer.
 Francis, Edward, 1894, B. Sc., M. D. (Ohio Medical College), assistant surgeon U. S. Marine Hospital, Washington, D. C.
 Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of Veterinary Medicine, Agricultural and Mechanical College.
 Frankenberg, George Theodore, 1902, M. E., Columbus, O., 310 East Rich street, assistant master mechanic of Columbus Iron & Steel Co.
 Frakenberg, John Theodore, 1899, M. E. in EE., Columbus, Central Union Telephone Co.
 Frankham, Charles R., B. A. (Otterbein University), 1903, M. A., Columbus.
 Fravel, George B., 1888, M. E., Chicago, Ill., master mechanic, Chicago Terminal Division.
 Frayer, Lee Ambrose, 1896, M. E., Columbus, Frayer & Miller motor cycles.
 Frechtling, Arthur George Richter, 1901, M. E., Union Pacific Ry., steam heat inspector, Cheyenne, Wyoming.
 Freeman, Stanton Sholes, 1898, E. M., superintendent St. Carbon Iron and Steel Co., Parryville, Pa.
 French, Thomas Ewing, 1895, M. E., Columbus, associate professor of architecture and drawing, State University, 1458 Worthington street.
 Freshour, William McDowell, B. A., 1899, M. A. (1903), (Wittenberg College) 1903, I. L. B., Piqua.
 Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.
 Frost, George W., 1900, M. E., Columbus, 241 Buttles avenue, sales manager, Columbus Storage Battery Co.
 Fullmer, Edward L., 1897, B. Sc., 1898, M. Sc., Mitchell, S. D., University of South Dakota, professor of sciences.
 Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.
 Funk, Roy William, 1902, B. Sc., Chesterhill, O.

G.

- Gains, Charles E., 1889, B. Ph., London, physician.
 Galbraith, John Howard, 1883, B. Ph., Columbus, journalist, 1087 Oak street.
 Gale, Cora C., 1893, B. Ph., Columbus, Oak street, near Grant.
 Gale, Franklin Henry, 1893, I. L. M. (I. L. B., University of Michigan) Columbus, 324 Oak street.
 Gallen, William Francis, 1897, M. E., Columbus, Case Manufacturing Co., foreman drafting room.
 Game, Reed Haskell, 1896, B. Ph., 1899, I. L. B., Columbus.
 Gamper, Hedwig E., 1900, B. Ph., Columbus.
 Gamper, Herman, 1899, M. E., Electrical Engineer O. S. & S. O. Home, Xenia, O.
 Gauch, James Orlando, 1902, B. A., 1903, M. A., West Manchester, O.
 Gayman, Charles W., 1900, B. Ph., Van Wert, Principal of the High School.
 Garber, Alberta D., 1889, B. Ph., A. M.
 Garber, John Murray, 1897, C. E., draftsman, Mt. Vernon Bridge Co., Mt. Vernon.
 Garber, Levi L., 1898, B. A., Belleville.
 Garman, Susan Editha, 1903, B. Ph., Dayton.
 *Garst, William Augustus, A. B. (Otterbein University and Harvard University), 1898, I. L. B., died April, 1903.
 Gee, Eugene C., 1897, M. E. in EE., San Francisco, Cal., 1106 Van Ness avenue, Special, Bell Telephone Co., 2116 Bush street.
 Gehrkens, Edward Frederick, 1894, M. E. in EE., Shenectady, N. Y., with General Electric Co.
 Geissinger, James Allen, 1895, B. A., pastor Centenary M. E. Church, Ripley, O.
 Genheimer, Eli Thomas, 1896, B. Ph.
 Genheimer, William F., 1897, I. L. B., Wheelersburg, O.
 Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.
 Gilmore, William Henry, 1899, B. Sc. (Agr.), Stock Farmer, Basil, Ohio.
 Given, James Byron, 1896, M. E. in EE., Western Electric Co., Chicago, Ill.
 Givens, Newton Edgar, A. B., (National Normal Univ.) 1896, I. L. B., Columbus.
 Glover, Sioux, 1882, B. Sc. (Mrs. Horton), Errid, Pa.
 Goddard, Loring Hapgood, 1892, C. E., farmer, Washington C. H., R. F. D. No. 5.

- Good, Paul Revere, 1899, B. A., 1900, M. A., Westerville.
- Goodell, Ralph Spencer, 1892, C. E., Mt. Vernon, assistant engineer Mt. Vernon Bridge Co.
- Goodman, Joseph Clarence, 1896, I. L. M., Columbus, 375 East Town street.
- Goodman, Sylvester Jacob, 1896, G. Ph., M. D. (W. & J. Medical College, 1900), Physician, Columbus, 238 State street.
- Gordon, Sarah Bryarly, 1902, B. Ph., St. Mary's.
- Gores, John Wesley, 1898, C. E., Boomer, W. Va., Mining Engineer for Boomer Coal Co.
- Graham, Emery Eugene, 1898, M. E. in EE., draftsman, Wellman-Seaver-Morgan Engineering Co., Cleveland, O.
- Graham, Reuben Jacob, 1901, B. Ph., teacher in High School, Chillicothe, O.
- Grandle, Frank Albert, 1891, G. Ph., Centerburg, pharmacist.
- Graner, Carl, 1898, G. Ph., Philippine Islands, hospital steward, U. S. Army.
- Grate, Charles Artemis, 1898, M. E., Aultman Co. Canton, O.
- Graves, William L., 1893, B. A., 1897, M. T., Assistant Professor in Rhetoric and English Language, State University, Columbus, 1313 Forsythe avenue.
- Gray, Genevieve, 1898, B. Ph. (Mrs. Levi Rawson), Sistersville, W. Va.
- Gray, James Collam, 1892, I. L. B., 1893, I. L. M., Pittsburg, Pa., attorney P. R. Ry.
- Graven, D. Homer (A. B., Ohio Normal University), 1900, I. L. B., Columbus, O.
- Green, Charles C., 1885, B. Sc., M. D., Beavery City, Neb., physician.
- Green, Jerome Joseph, 1893, M. E. in EE., Notre Dame, Ind., Notre Dame University, Professor of Physics and Elec. Engineering.
- Green, Joseph Faust, 1899, M. E. in EE., Moline, Ill., electrical engineer, Moline Electric Elevator Co.
- Green, Robert Lee, 1892, G. Ph., Notre Dame, Indiana, professor of Pharmacy, Notre Dame Univ.
- Greener, Gussie Howe, 1901, B. Ph., Rhinelander, Wisconsin.
- Gregg, Frank B., 1889, B. Ph., M. D.
- Gregory, Hiram D., 1880, E. M., attorney-at-law, office rooms Nos. 6 and 7 Bradford Bldg., Covington, Ky.
- Griffin, Mark H., 1897, M. E. in EE., Toledo, O., Spitzer Bldg., administrator estate of Chas. P. Griffin, and Life Insurance.
- Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist, 760 Mt. Vernon avenue.
- Griffith, David Mathias, 1896, I. L. B., Kecksburg, Pa.
- Griffith, Wellington John, 1892, I. L. B., A. B. (De Pauw Univ.), Tiffin.
- Griffiths, Benjamin Lincoln, 1898, I. L. B., Vaughnsville.
- Griggs, Robert Fiske, 1903, B. Sc., Columbus.
- Grimley, George Perry, 1890, B. A., 1891, M. A. (Ph. D., Johns Hopkins University, 1894), Topeka, Kan., Professor Natural History, Washburn College.
- Griswold, Lawrence William, 1892, B. A., 217 W. Twelfth street, New York City.
- Groff, Orsyla Ann., 1894, G. Ph., North High street, Columbus, pharmacist.
- Groff, Warren Noble, 1896, B. A., 1899, I. L. B., Tiffin.
- Gruen, Francis William, 1899, B. Ph., 1899, I. L. B., Cincinnati, O.
- Guerin, Martha, 1896, B. Ph. (Mrs. Wallace S. Elden), Columbus.
- Gugle, George Linville, 1896, I. L. B., Columbus.
- Gugle, Marie, 1897, B. A., Toledo, O., teacher in High School.
- Guittard, Claude Bernard, 1903, B. Ph., assistant in library, O. S. U., Columbus.
- Guittard, Virgil, 1894, B. Sc., Philippine Islands.
- Guiteau, William B., 1897, B. Ph., Toledo, O., teacher in High School.
- Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

H.

- Haas, Frank, 1895, C. E., 1896, E. M., chemist, Fairmount Coal Co., Fairmount, W. Va.
- Hagenbuch, George Edwin, 1903, B. Ph., Urbana.
- Hagler, Howard, 1889, B. Sc., Washington C. H., farmer.
- Haigler, Charles Edmund, 1898, B. Sc., Professor of Physics, Michigan School of Mines, Houghton, Mich.
- Hale, Frederick James, 1898, M. E., 1900, M. Sc., Westinghouse Machine Company, gas engine department, Pittsburg, Pa.
- Hall, Harry R., 1889, E. M., superintendent Blast Furnace, Lake Superior Power Company, Sault St. Marie, Ontario, Canada.
- Halterman, Oscar Elmore, 1895, I. L. B., B. S. (National Normal University), Columbus, O.

- Hambleton, Ethel Ada, 1901, B. Ph., Columbus.
- Hamilton, Charles R., 1893, B. A., Zanesville, 219 North Seventh street, Dun's Commercial Agency.
- Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon.
- Hamilton, Frank Edward, 1903, B. Sc. (Agr.), Columbus.
- Hamilton, Ross Elroy, 1903, C. E., Coshocton.
- Hammond, Bessie B., 1897, B. Ph., Columbus, 443 Mt. Vernon avenue.
- Hammond, Harry J., 1900, D. V. M., Amadee, Cal.
- Hammond, John Miller, 1902, C. E., Cleveland, O., 91 Water street, assistant engineer C. C. C. & St. L. Ry.
- Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher, 90 North Twenty-second street.
- Hance, Harry Thomas, 1901, B. Sc. (Chem.), Columbus, O., 1093 East Long street, Coffee and Spice Company, chemist.
- Hancock, Winfield Scott (A. B., Marietta), 1900, LL. B., Marietta.
- Hancock, David R., 1889, G. Ph., M. D., Columbus, physician.
- Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist, corner Schiller and Third streets.
- Hannum, William Hamilton, 1897, B. A., India, missionary.
- Hapgood, Eugene Palmer, 1902, B. Sc., New Lexington, O., Imperial Clay Co.
- Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.
- Harkins, Robert R., 1900, M. E., instructor in machine design, University of Cincinnati, Cincinnati, O., 3003 Scioto street.
- Harlor, John David, 1895, B. A., Columbus, teacher in East High School.
- Harper, Ellahue A. (B. A., Ohio Wesleyan University), 1900, LL. B., Columbus, Ohio.
- Harper, Merritt, 1901, B. Sc. (Agr.), M. Sc. (University of Illinois, 1902), Columbus, Mo., assistant animal husbandry, University of Missouri; special agent in plant and forage crop investigation for U. S. Department of Agriculture.
- Harrington, Evaline, B. Ph. (Wooster University), 1903, M. A., Columbus.
- Harris, Charles Pearl, 1899, B. Ph., West Liberty.
- Harris, Frank Laverne, 1894, LL. B. (Ph. B., Tri-State Normal University), Payne.
- Harris, Walter Conger, 1893, B. Sc., King's Oaks, New York, corner Nineteenth street and King's highway, with art department of "World."
- Harrison, Warner, 1892, LL. B., East Town street, Columbus, attorney and solicitor, C. A. & C. Railway.
- Harrison, William Henry, 1885, C. E., engineer Sierro De Pasco Ry., Oroya, Peru.
- Harrold, Ernst Ellwood, 1895, G. Ph., Philadelphia, Pa., corner Twelfth and Walnut streets, care Arthur H. Thomas Company.
- Harrop, Carl Boileau, 1902, E. M., Bronson, Mich., chemist The Bronson Portland Cement Company.
- Harrop, Herbert Bailey, 1898, B. Sc., Columbus, 1323 Forsythe avenue.
- Hartford, Martha Dudley, 1902, B. Ph., Columbus, O. S. U. Library.
- Hartsough, William H., Jr., 1898, B. Ph., Columbus, 1356 Hunter avenue.
- Hartwell, Arthur, 1888, M. E., sales manager Westinghouse E. & M. Company, Pittsburg, Pa.
- Hartwick, Louis M., 1897, M. E., master mechanic of blast furnace, Pueblo, Col., 217 Quincy street.
- Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., 1899, LL. B., Columbus, 145 King avenue.
- Harvey, Emery Wayland, 1896, B. Ph., 253 West 109th street, New York City, Milton Bradley Company, secretary of O. S. U. Association of New York.
- Harvey, Florence Danford, 1898, B. Ph. (Mrs. Rogers), Columbus.
- Harvey, Sherman Lee, 1896, G. Ph., Columbus, druggist, East Main street.
- Harward, Arthur B., 1900, B. A., Columbus.
- Hassler, Robert Hanich, 1892, M. Sc. in EE., engineer International Motor Car Company, Indianapolis, Ind.
- Hastings, Edwin Georeg, 1898, B. Sc., Austinburg, O.
- Hauk, Will Comrie, 1901, B. A., South Charleston.
- Hay, Dwight G., 1903, LL. B., Wooster.
- Hayden, Cassius Clay, 1901, B. Sc. (Agr.), Madison, Wis., 217 Mill street, special student, University of Wisconsin.
- Hayes, Seth, 1892, B. Sc., Fremont, science teacher of High School.

- Hayman, William C., 1900, M. E. in EE., Schenectady, N. Y., engineer, wire and cable department, General Electric Company.
- Hayward, George E., 1893, C. E., Bronson, Mich., general manager The Bronson Portland Cement Company.
- Hazelton, Bird, 1898, B. Ph., New Straitsville.
- Hazlett, Robert, Jr., 1887, C. E., Wheeling, W. Va., 921 Main street, chief engineer, Pan Handle Traction Company, City Bank Building.
- Heacock, Clark Clyde, 1903, D. V. M., Beloit.
- Heacock, William Preston, 1898, LL. B., A. B. (Ohio Normal University), Columbus.
- Heath, Arthur T., 1887, G. Ph., analytic chemist, consulting engineer and contractor, Ashtabula, O.
- Hebble, Charles Roy, 1896, M. E. in EE.
- Hedges, Herry, 1888, B. A.
- Heller, Albert Henry, 1890, C. E., Professor Civil Engineering, Ohio State University, Columbus, O., 1249 Neil avenue.
- Helvey, George Stanley, 1903, M. E., Hamilton.
- Henderson, Adelbert Andrew, 1898, C. E., transit man, county engineer, Pittsburgh, Pa.
- Henretta, Charles Michael, 1896, E. M., mining engineer, Canadian Pacific Railroad, Fernic, B. C.
- Hensel, Donald Dean, 1902, B. Ph., Eaton, O.
- Herbert, Charles T., 1897, LL. B., Columbia, South America, Boca del Terra.
- Hermes, Edith S., 1898, B. Ph., Portsmouth.
- Herrick, Louise, 1893, B. A. (Mrs. Harry Abbott), Columbus, 1454 Highland street.
- Herrick, Sara Ethel, 1902, B. Ph., Columbus, O.
- Hershey, Harry Hartman (A. B., Mt. Union College), 1900, LL. B., Columbus, O.
- Hertner, John H., 1899, M. E. in EE., Hertner Electric Company, Cleveland, O.
- Hess, Florence Louise, 1895, B. Ph., Columbus.
- Hewitt, Strafford Reaves, 1898, M. E. in EE., engineer for Central Coal and Iron Company, Central City, Ky.
- Hiatt, William Arthur, 1895, B. Ph., Marietta, O., St. Clair Building, attorney-at-law.
- Hicks, Nellie Rogers, 1902 B. A., Centerburg, O.
- Higbee, Charles E., 1883, B. Sc.
- High, Odessa, 1896, B. A., West Jefferson.
- Hill, Cortland Latimer, Jr., 1903, C. E., Berlin Heights.
- Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.
- Hill, I. F. Reynolds, 1896, B. Sc. (H. & F.), St. Louis, Mo., Missouri Botanical Garden agent, Bureau of Forestry, U. S. Department of Agriculture.
- Hill, Mamie Faye, 1902, B. Sc. (Dom. Sci.), Columbus, O., 152 West Woodruff avenue, teacher of domestic science.
- Hine, James S., 1893, B. Sc., Columbus, Associate Professor of Entomology and Zoology, State University.
- Hine, Lucius A., 1888, E. M., 140 Fiftieth street, Chicago, Ill., President and Treasurer Hine-Watt Manufacturing Company, 60 Wabash avenue.
- Hipple, John Merton, 1898, M. E. in EE., Westinghouse E. & M. Company, Wilkinsburg, Pa.
- Hirsch, Gustav, 1897, M. E. in EE., general superintendent Citizens' Telephone Company, Detroit, Mich.
- Hirsch, Rudolph, 1901, B. Sc., assistant in agricultural chemistry, Ohio State University, Columbus, 1060 South Front street.
- Hirst, Anna Brewster, B. A. (Antioch College), 1900, M. A., Yellow Springs.
- Hirst, Harry, 1903, E. M., Midvale.
- Hitch, James Franklin, 1902, C. E., Huntington, W. Va., Box 85, engaged in railroad work.
- Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, New York.
- Hoffman, Arthur Sullivant, 1897, B. A., Ass't Ed. Chautauquan, Chicago, Ill.
- Hoffman, Hattie DeLong, 1900, B. Ph., teacher public schools, Mansfield, O.
- Holbrook, George Frederick, 1902, E. M., San Bernardino, Cal., 595 D street, surveyor.
- Holcomb, Harry John, 1901, B. A., Columbus.
- Homan, Frank, 1895, C. E., Batavia, O., civil engineer.
- Hommon, Harry Britton, 1903, B. Ph., Marble Cliff.
- Hood, Sherman, 1894, B. Sc., Mineral Ridge, O., market gardener.

- Hoover, Clarence Boal, 1903, B. Sc. (Agr.), Columbus.
 Hoover, Frederic Roland, 1899, B. Ph., Columbus.
 Hopkins, Bertha Marie, 1902, B. Ph., teacher in Marysville public schools.
 Hopkins, Charles Delnow, 1893, LL. B. (B. A., Ohio Wesleyan University), Athens.
 Hopkins, Clara Mae, 1902, B. Ph., Marysville, O. (Mrs. William Snodgrass).
 Hopkins, Edith Estelle, 1902, B. Ph., teacher, Milford Center, O.
 Horton, Henry Pomeroy, 1889, B. Ph.
 Hough, Benson Walker, 1899, LL. B., Delaware.
 Houghton, Henry Spencer, 1901, B. Ph., Baltimore, Md., medical student, Johns Hopkins University.
 Houle, Frank Gaydon, A. B., A. M. (Western Reserve), LL. B., Bellevue, O.
 Houseman, Ruth U., 1897, B. Ph., Painesville (Mrs. R. Belknap).
 Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.
 Hovey, Samuel Clark, B. A. (Buchtell College), 1898, LL. B., Akron, O.
 Howald, Ferdinand, 1878, B. Sc., 1881, E. M., Rush Run, W. Va., coal operator.
 Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.
 *Howard, Anna F., 1900, B. Ph., died January, 1901.
 Howard, Curtis C., 1878, B. Sc., M. Sc., 115 Jefferson avenue, Columbus, Professor of Chemistry in Starling Medical College.
 Howard, Fanny Fern, 1896, B. A. (Mrs. McDonald Mitchell), Charleston, Ill.
 Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney.
 Howard, John Wilmont, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.
 Howells, E. S., 1884, E. M., general manager Howells & Jones Company, Birmingham, Ala., 2914 Juniper avenue.
 Howels, Thomas J., 1897, E. M., chemist, Pocahontas Coal Field for National Steel Company, Bluefield, W. Va.
 Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Company.
 Huddleson, Don Carlos, 1897, G. Ph., Columbus, 891 Dennison avenue, instructor Physical Education, State University, student Starling Medical College.
 Huddleson, Frank Newton, 1902, E. M., Columbus, O., 891 Dennison avenue, National Steel Company.
 Hudson, Clara Putnam, 1902, B. Ph., Middleport, O.
 Huffman, Lillian Stuart, 1899, B. Ph., Columbus, 389 East Rich street, O. S. U. Library.
 Huggins, Burch Delaplaine, 1899, B. Ph., attorney, Columbus.
 Hughes, Raymond Mollyneaux, A. B. (Miami University), 1897, M. Sc., Miami University, Professor of Chemistry.
 Huling, Frank, 1903, B. A., Columbus, 992 Oak street.
 Hull, Mary Louise, 1894, B. A. (Mrs. C. H. Farber), Columbus, 392 West Seventh avenue.
 Hull, Walter Austin, 1902, E. M., Bolivar, Pa., chemist, Reese-Hammond Fire Brick Company.
 Humphrey, J. Scott, 1879, B. Sc., Indianapolis, Ind., 1407 North Illinois street, Assistant City Civil Engineer.
 Humphreys, Leona, 1895, B. A.
 Hungelmann, Arthur, 1902, B. Sc., Columbus, O.
 Hunt, Mary Fulton, 1901, B. Ph., Columbus, East Broad street.
 Hunt, William Franklin, 1887, M. E. (LL. B., 1895, LL. M., 1896, University of Minnesota), attorney-at law, New York Life Building, St. Paul, Minn.
 Hunter, Joseph Symmes, 1901, B. A., Millersburg, O.
 Hunter, Madone C., 1900, M. E. in EE., electrical engineer Kilbourne & Jacobs Manufacturing Company, Columbus, O.
 Huntington, Arthur, 1899, M. E., Chicago, Ill., engineer Westinghouse E. & M. Company.
 Huntington, Charles Clifford, B. Sc. (Antioch College), 1902, B. Ph., 1903, M. A., Yellow Springs, O.
 Huston, Charles H., 1897, LL. B. (B. S., Tri-State College, Ind.), Mansfield.
 Huston, George Enos, 1903, LL. B., Millersburg.
 Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-law.
 Hyle, Charles A., 1896, M. E. in EE., Oklahoma, O. T., observer, U. S. Weather Bureau.

*Dead.

I

- Imes, Marion, 1899, B. Sc. (Agr.), 1901, D. V. M., Chicago, Ill., meat inspector U. S. government office.
 Ingram, Imogene, 1897, B. Ph., Columbus (Mrs. John Miles).
 Innis, Lyman H., 1893, B. A., 1895, LL. B., attorney, Columbus, 323½ South High.
 Ireland, Guy Llewellyn, 1895, M. E.
 Irvin, Chadwick H., 1897, M. E., Pueblo, Col., 217 Quincy street, draftsman, Colorado Fuel and Iron Company.
 Irwin, Albert Newton, 1901, D. V. M., Dalhart, Texas.

J

- Jackson, Frank Pierce, 1892, LL. B., 1893, LL. M., Columbus, attorney, 82 South Washington avenue.
 Jacoby, Mrs. Sarah C., 1903, B. A., Columbus.
 James, Florence May, 1896, B. A. (Mrs. Oscar R. Flynn), Chicago, Ill., 5802 Jackson avenue.
 Jaynes, Allan B., 1900, Tucson, Ariz., Box 641.
 Jeffrey, James Fred, 1900, B. Sc., Columbus.
 Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University, Columbus, 128 West Tenth avenue.
 Jenkins, William B., 1893, C. E., Bellefontaine, draftsman, Bellefontaine Bridge and Iron Company.
 Jenkins, Willis H., 1894, C. E., Sheridanville, Pa.
 Jennings, Elma Fogg, 1902, B. Ph., Canal Winchester, O.
 Jennings, Irvin G., 1899, LL. B., Zanesville.
 Jennings, Levi E., 1897, M. E. in EE., Eaton, O.
 Jennings, Otto Emery, 1903, B. Sc. (Agr.), Olena.
 Johnson, Charles W., 1896, M. E. in EE., Norwood, O., 2272 Jefferson avenue, production manager, Bullock Electric Manufacturing Company.
 Johnson, Earle S., 1900, M. E. in EE., General Electric Company, Schenectady, New York.
 Johnson, Theodore Charlemagne, 1903, D. V. M., Columbus.
 Johnson, Walter Alexander, 1902, M. E., Columbus.
 Johnston, Frederick Symmes, 1899, B. Sc. (Agr., College Station, Tex., Professor of Agriculture Texas Agricultural College.
 Johnston, George Edward, 1892, C. E., L. & N. R. R., Louisville, Ky., 712 West Broadway.
 Johnston, Herbert Lincoln R., 1892, M. E. in EE., Troy, O.
 *Jones, A. A., 1886, C. E., died May, 1894.
 Jones, Arthur James, 1898, M. E. in EE., Wilksburg, Pa., Westinghouse Electric and Manufacturing Company.
 Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner Insurance Agency.
 Jones, Alexander Houston, 1895, M. E. in EE., St. Louis, Mo., 3341 Morgan street, consulting engineer, 418 Holland Building.
 Jones, Benner, 1897, LL. B., B. A. (Rio Grande College, Ind.), Jackson.
 Jones, Daniel C., 1902, B. Ph., Jackson, O., student O. S. U. Law School.
 Jones, Daniel D., 1893, G. Ph., Athens, O.
 Jones, Hanby Raymond, B. Ph. (Otterbein University), 1901, LL. B., Columbus, Ohio.
 Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chemist William Cramp & Sons, ship builders.
 Jones, John, 1901, B. Ph., Columbus.
 Jones, Lloyd, 1903, B. Sc. (Agr.), Columbus.
 Jones, Paul, 1880, B. A., Columbus, attorney-at-law, Hayden Bank Building.
 Jones, Pearl N., 1892, M. E. in EE., engineer and salesman Westinghouse E. & M. Company, Wilksburg, Pa.
 Jones, Richard Thomas, 1900, B. Ph., Columbus, 172 Seventeenth street.
 Jones, Smiley, 1894, E. M., Prescott, A., superintendent Empire Gold Mining and Milling Company.
 Jones, William Francis, 1896, D. V. M., Cincinnati, Miami Medical College.
 Judd, Horace, 1897, M. E., 1899, M. Sc., Assistant Professor in Experimental Engineering, Ohio State University, Columbus, 245 West Fourth avenue.

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- Judkins, Clyde H., 1897, LL. B. (A. B., Scio College), Cleveland, O.
 Judson, Walter Raymond, 1903, M. E., Dayton.
 Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-law, 387 Oak street.

K

- Kahle, James Byron, Ph. B. (Hiram College), LL. B., 1902, Columbus, O.
 Kanmacher, Samuel H., 1900, M. E. in EE., testing department General Electric Company, Schenectady, N. Y.
 Kauffman, Henrietta Christine, 1901, B. Ph., Columbus, University Grounds.
 Kauffman, Margaret Glenn, (Mrs. John M. Barringer), 1901, B. Ph., Columbus, University Grounds.
 Karshner, George M., 1900, B. A., Denver, Col., Denver Gas Company.
 Keagle, Anna Brown, 1895, B. Ph., Columbus, teacher North High School, 59 West Fourth avenue.
 Keating, David Thatcher, 1899, B. Ph., 1902, LL. B., Columbus, 1317 East Broad street.
 Keating, Harvey, 1902, B. Sc., Columbus, O., 1317 East Broad street.
 Keffler, Frederick, 1892, M. E., 31 Nassau street, New York City.
 Keifer, William White, 1886, B. A. (LL. B., Cincinnati), Springfield, attorney-at-law.
 Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., 1898, M. D. (O. M. U.), 1899, M. D. (Cleveland Homeopathic Medical College, Columbus, physician.
 Kellerman, Ivy, 1898, B. A., 1899, M. A. (Cornell University), W. Eleventh avenue, Columbus, O., student Chicago University.
 Kellicott, William E., 1898, B. Ph., assistant in Zoology, Barnard College, New York.
 Kellison, Edward Lafayette, 1897, B. Ph., 1900, LL. B., Quincy.
 Kemmler, Edward A., 1888, C. E., 895 South High street, Columbus, assistant city engineer.
 Kern, William Frederick, 1902, B. Sc., Columbus, 75 West Tenth avenue, chemist Buckeye Malleable Iron and Coupler Company.
 Kerr, Samuel Thompson, 1894, M. E. in EE., Martins Ferry, superintendent Municipal Electric Light Plant.
 Kersey, William Rufus, 1899, M. A. (B. A., Earlham College), Columbus, 433 East Town street.
 Kershaw, Francis Stewart, 1891, B. Ph., Cambridge, Mass.
 Kershaw, Samuel Charles, 1892, B. Ph., Columbus, Weisman, Lilley & Kershaw.
 Kester, Fred, Edward, 1895, M. E. in EE., A. M. (Cornell '99), Columbus, 1463 Neil avenue, Assistant Professor in Physics, Ohio State University.
 Kettler, Frank Christian, 1901, C. E., North Works, Illinois Steel Company, Chicago, Ill., 487 La Salle avenue.
 Klesewetter, Louis Frank, 1891, C. E. (A. B., Harvard, '92, and A. M., '93), Columbus, Cashier Ohio National Bank, Treasurer O. S. U.
 Kiler, Abdel William, 1896, G. Ph., druggist, Columbus, Eighth and High streets.
 Kinder, Gordon D., 1900, B. Ph., Columbus, student, O. S. U. Law School.
 Kimberley, Charles H., 1900, B. Sc., 1901, M. Sc. (pharmacy), Fargo, N. D., instructor in Pharmacy, North Dakota Agricultural College.
 King, Herbert Sumner, 1901, C. E., Buckhannon, W. Va., assistant engineer, Belington & Northern Railroad Company.
 King, Robert James, 1899, B. A., 1902, LL. B., Zanesville.
 King, Roy Stevenson, 1902, M. E., National Cash Register Company, Dayton, O.
 Kirby, Harriet R., 1898, B. A., 1903, M. A., Columbus, teacher in North High School.
 Kirk, George Barlow, 1901, B. A., teacher in High School, Mechanicsburg.
 Kirker, Harry L., 1889, B. Sc., with the Westinghouse Company, London, England, "The Strand," Westinghouse Building.
 Kiser, Katherine Daniel, 1895, B. A., Columbus, teacher in High School, 81 Miami avenue.
 Klein, David, 1900, B. Ph., 1903, M. A., Columbus, Rabbi of Jewish Synagogue.
 Klie, Walter, 1903, M. E., Columbus.
 Kline, Charles H., 1897, M. E. in EE., Dayton, civil engineer with R. O. Kline, consulting engineer.
 Knauss, William Henry, 1895, B. Sc., M. D. (Starling Medical College, 1903), 1317 Dennison avenue.
 Knecht, Arthur Edward, 1898, M. E., Cincinnati, O., mechanical engineer Screw and Tap Company.
 Knight, Caroline E., 1900, B. Ph., Columbus.

- Knight, Ruby Ray, 1895, B. Sc., Middleport.
 Knight, William A., 1900, M. E., Columbus, assistant professor of Machine Shop Practice, State University.
 Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.
 Knopf, George W., 1883, B. Sc., Pottstown, Pa., engineer, McClintic-Marshall Construction Company.
 Knox, Frank Stewart, Jr., 1900, E. M., resident engineer Federal Coal and Coke Company, Grays Flat, W. Va.
 Kohl, Clayton Charles, 1901, B. Ph., teacher in High School, Mechanicsburg, O.
 Kohr, Donald Alexis, 1898, B. Ph., assistant manager Lowe Bros.' Paint Works, Dayton.
 Kohr, Paul Homer, 1903, B. A., Columbus.
 Kramer, John Franklin, B. A. (Ohio Normal University), 1902, LL. B., Mansfield, O., 138 Wood street.
 Krauss, Bertha Katherine, 1892, B. Ph., Ottawa, 304 East Main Cross street.
 Kreiger, Charles Henry, 1887, G. Ph., Chicago, Ill., with Morrison Plummer Company, druggists.
 Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., attorney, Columbus, 277 South Eighteenth street.
 Krumm, Herbert Zettler, 1898, B. Ph., Columbus, 975 South High street.
 Krumm, Lillian Louise, 1895, B. Ph. (Mrs. Harry Rush Wilson), Columbus, 1459 Bryden road.
 Krumm, Louis Ralph, 1898, M. E. in EE., Columbus, Ga., engineer Southern Telephone Construction Company.
 Krumm, Thomas Zettler, 1902, C. E., Waverly, Iowa, Box 70, instrument man, C. G. W. R. R.
 Krupp, William Emil, 1899, LL. B., Uhrichsville.
 Kuhn, Valley Howard, 1896, M. E. in EE., Etna.
 Kuhn, Harry Waldo, 1897, B. Sc., Ph. D. (Cornell), Assistant Professor of Mathematics, Ohio State University, 215 West Tenth avenue.
 Kunkle, Fred Raymond, 1903, M. E. in EE., Bryan.

L

- Lamb, Morgan Baxter, 1901, D. V. M., Columbus, O., graduate student of veterinary medicine, O. S. U.
 Lamb, Whitney E., 1900, M. E. in EE., testing department General Electric Company, Schenectady, N. Y.
 Lambert, Elza J., 1903, LL. B., Chesterhill.
 Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., chief engineer, Westinghouse E. & M. Company.
 Lamme, Bertha A., 1893, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Company.
 Landacre, Francis Leroy, 1895, B. A., Associate Professor of Zoology and Entomology, State University, Columbus, 299 West Sixth avenue.
 Landacre, Walter Alexander, 1891, G. Ph., 1902, B. Sc., 1408 Wesley, Columbus, storekeeper, Chemical Store Room, O. S. U.
 Landis, Walter Victor Titus, 1895, B. Ph., Dayton.
 Lane, Quinton R., 1898, B. Ph., 1900, LL. B., attorney, Columbus.
 Ianman, Faith Robinson, 1903, B. Sc. (Dom. Sci.), Columbus, 1447 Fair avenue.
 Large, Joseph H., 1890, C. E., draftsman Massillon Bridge Company, Massillon, Ohio.
 Laughlin, Hugh Clarence, 1890, B. A. (A. M., 1895, University of Nebraska), 530 West 123rd street, New York, teacher in Peter Cooper High School.
 Lavery, William F., 1890, D. V. M., meat inspector Bureau of Animal Industry, Kansas City, Mo.
 Lawrence, Arthur K., 1897, G. Ph., Columbus, 69 North Seventeenth street, pharmacist.
 Laybourne, Lawrence Everette, 1902, LL. B., Springfield, O., 7 Bushnell Bldg.
 Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.
 Lee, Corless E., 1900, M. E. in EE., with General Electric Company, Schenectady, N. Y., 1 Division street.
 Lee, Edwin S., 1893, G. Ph., Columbus, 144 West Ninth avenue, druggist.
 Lee, Robert M., 1897, M. E., draftsman Ordnance Department, U. S. Army, Washington, D. C.
 Leeper, Charles Foster, 1903, LL. B., Marietta.

- *Leffler, Edward Victor, 1896, G. Ph., died July 13, 1901.
 Lehman, John Wesley, 1899, B. Ph., Canal Winchester.
 Lemert, Helen Ora, 1894, B. A., Columbus, teacher East High School.
 Lentz, Alice B., 1897, B. Ph., Lloydsville.
 Lentz, Florence, 1901, B. Ph., Marysville.
 Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.
 Leonard, Hannah Margaret, 1903, B. Ph., Columbus, 414 Mt. Vernon avenue.
 Leonard, James Lincoln, 1893, LL. B. (B. S., Ohio Normal University), Wel come.
 Leonard, Ralph Sherman, B. A., M. A. (Denison University), 1902, LL. B., Granville, O.
 Lesh, John Howard, 1901, M. E., Cleveland, O., 806 Willson avenue, check draftsman, Garry Iron and Steel Company.
 Levering, Orpheus D., 1893, M. E., foreman of tool room, Columbus Machine Company, Columbus, O.
 Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.
 Lewis, Thomas K., 1894, B. Sc., Columbus, 1337 Summit street, Instructor in Architecture and Drawing.
 Lincoln, Paul Martyn, 1892, M. E. in EE., Westinghouse E. & M. Company, Pittsburg, Pa., Fifth and Elysian streets.
 *Lindo, William C., 1896, C. E., died 1900.
 Linebaugh, Jesse J., 1899, M. E. in EE., Schenectady, N. Y., electrical engineer, testing department, General Electric Company.
 Linson, Irvin, 1882, B. A.
 Linville, Clarence P., 1900, B. Sc., 1902, M. A., Jackson, O., Box 551, chemist for Globe Iron Company.
 Linxweller, Otto Zimmerman, 1903, M. E., Dayton.
 Lipp, Charles Clinton, 1903, D. V. M., New Middletown.
 Lisle, Charles H., 1900, B. Ph., Pataskala.
 Lisle, Dallas Gypsi, 1899, B. Ph. (Mrs. J. Stilwell Stone), Findlay, O.
 Lisle, Leslie Mae, 1899, B. Ph., Columbus.
 Lisle, Mabel, 1897, B. Ph. (Mrs. Wm. Mead), King avenue, Columbus.
 Lisle, Thomas G., 1903, B. Ph., Columbus.
 Logan, Lavallette Lasea, 1896, E. M., general manager Rockhill Iron and Coal Company.
 Logsdon, Carey Lignori, 1899, B. Ph., Columbus.
 Logsdon, Clement Jay, 1898, G. Ph., Osborne, O.
 Long, Frank Clark, 1903, B. Sc. (H. and F.), West Sonora.
 Long, George Garfield, 1903, E. M., Tippecanoe.
 Loomis, John Cooper, 1898, LL. B., Tiffin.
 Loren, Mary McMillan, 1903, B. Ph., Columbus, 1371 North High street.
 Lott, Charles Milford, 1895, M. E. in EE., superintendent electric light plant, Hicksville, O.
 Loveberry, Clarence, 1896, D. V. M., meat inspector Bureau Animal Industry, Minneapolis, Minn.
 Lovejoy, Ellis, 1885, E. M., New Lexington, O., general manager Imperial Clay Company.
 Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Co.
 Luce, George Ernest, 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus, 95 Hamilton avenue.
 Luse, Clara E., 1897, B. Ph. (Mrs. Herbert Scott), Marietta.
 Lusk, William Vinton, 1893, D. V. M., veterinary surgeon U. S. Cavalry, Washington, D. C.
 Lydenberg, Walter B., 1898, B. A., Dayton.
 Lynas, Caroline, 1898, B. A., Columbus, 109 West Gay street.
 Lynas, Charles E., 1898, B. A., Columbus, 194 Hamilton avenue.
 Lyon, Arthur H., 1900, M. E., works manager, New York Blower Company, Bucyrus, O.

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- Maag, Benjamin Franklin, 1899, M. Sc. (B. Ph., Wooster University), Mt. Eaton.
 Macguire, Charles White, 1895, G. Ph., '97, M. D. (Toledo Medical College), Toledo, O., physician and pharmacist, corner Utah and Fassett streets.

- Machwart, Washington J., B. Sc. (Muskingum College), 1900, M. A., Mt. Eaton.
- Mack, Egbert Hiram, 1903, B. Ph., Sandusky.
- Mackey, Ure LaVerne, 1893, M. E. in EE. (B. A., Wooster University).
- Magly, Robert O., 1897, G. Ph., chemist, Miller-Wagoner-Fiesner Company, Columbus, O.
- *Magruder, Leonard Anthony, 1895, B. Ph., 1896, LL. M.
- Maier, John Valentine, 1895, LL. B. (B. S., Northern Indiana Normal University), Edon, O.
- Malone, William Ruskin, 1885, B. A., New York City, with New York Life Insurance Company, room 1917, Park Row Building.
- Manecke, Gilbert, 1897, LL. B., Toledo, O.
- Manley, Rush Emmett, 1894, M. E. in EE., chief inspector Central Union Telephone Company, Columbus.
- Mann, Wilber Edwin, 1899, B. Ph., 1900, M. A., Columbus, 1420 Wesley avenue.
- Marckworth, Otto Stanley, 1901, B. Sc. (Chem., Columbus, 259 Wilbur avenue, manager Ohio Testing Laboratory, 25 Board of Trade.
- Mark, Mary Louise, 1903, B. A., Columbus.
- Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of Science, Male High School.
- Marquard, Frank Fred, B. L., 1896, C. E., Sharon, Pa., 59 Walnut street, superintendent Sharon Coke Company.
- Marshall, Charles Howard, 1903, M. E., Fair Haven.
- Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney, 1566 Neil avenue, special counsel for City Solicitor.
- Marshall, Ida, 1902, B. Sc. (Dom. Sci.), Hemlock, O.
- Marshall, Willard B., 1900, M. E. in EE.
- Martell, Leonard Roland, 1898, B. A., Columbus, 1665 South High street.
- Martin, Edwin Dunlevy, 1891, B. Ph.
- Martin, George, 1897, M. E. in EE., wire chief Central Union Telephone Company, Youngstown, O.
- Martin, John Douglas, Jr., 1901, M. E., Dennison, P., C., C. & St. L. shops.
- Martin, Percy, 1892, M. E. in EE., general manager Daimler Motor Company, Coventry, England.
- Martin, William Kookan, 1903, B. Ph., Lancaster.
- Martz, Velorus, 1901, B. A., Mt. Sterling.
- Marvin, Charles Frederick, 1883, M. E., Washington, D. C., 1404 Benney street, U. S. Weather Bureau.
- Mason, George F., 1890, G. Ph., M. D. (Milwaukee Medical College, 1900), Milwaukee, Wis., physician.
- Masters, George Albert, 1886, C. E., assistant bridge engineer, A., T. & S. F. Ry., Topeka, Kan.
- Mathers, John Harrison, 1895, B. Ph., Conover.
- Mathias, Frederick W., 1893, B. Sc., Toledo, teacher High School.
- Matson, George H., 1892, G. Ph., 169 Hamilton avenue, Columbus, druggist and professor of Pharmacy and Materia Medica, Ohio Medical University.
- Matson, William Edgar, 1896, M. E. in EE., Lynn, Mass., production department, General Electric Company.
- Matthews, Max Moses, 1902, B. Ph., Vinton, O.
- Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.
- Mays, James Wesley, 1897, B. Ph., Columbus.
- McAllen, William Johnson, 1894, C. E., civil engineer, Illinois Steel Company, Chicago, Ill., 42 Cedar street.
- McAllister, Earl Saddler, B. Ph., 1902, Columbus, 1143 Neil avenue, student O. S. U. Law School.
- McCall, Arthur Gillett, 1900, B. Sc. (Agr.), Bureau of Soils, U. S. Department of Agriculture, Washington, D. C., assistant in Physical Laboratory.
- McCallum, Raymond, 1900, B. Ph., Dayton.
- McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., attorney, Columbus, 737 Bryden road.
- McCarter, Flora, 1897, B. A. (Mrs. George McAuley), Columbus, 1216 Bryden road.
- McCarter, Robert Dale, Jr., 1895, M. E. in EE., Clem House, Surrey street, "Strand," London, England, manager and engineer Bath Electric Tramway, Ltd.
- McCleary, Clayton A. (Ph. B., Franklin College), 1900, LL. B., Lorain.

- McClelland, Chester Arthur, 1903, B. Sc. (Agr.), Terrace Park.
- McClelland, Chalmers Kirk, 1898, B. Sc. (Agr.), M. S. A. (Cornell, 1902), West Raleigh, N. C., Assistant Professor of Agriculture, North Carolina A. and M. College.
- McClelland, Robert Lyle, 1901, D. V. M., St. Joseph, Mo., Box 551.
- McClure, Robert E., 1900, LL. B., Dayton, O., room 7, McIntire Building, attorney.
- McCormick, J. H., 1880, M. E., mechanical engineer, Columbus, 1354 Fair avenue.
- McCormick, William Francis, 1896, M. E., Columbus, O.
- McCullough, George Elmer, 1891, B. Sc.
- McDonald, Joseph Sylvester, 1901, B. Ph., Rendville.
- McDowell, James Keen, 1903, B. Ph., Columbus.
- McDowell, John Andrew, 1882, B. Sc., 949 Neil avenue, Columbus, cement engineer.
- McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law, 92 North Twenty first street.
- McFarland, Horace Maley, 1902, E. M., Dayton, Tenn., care Aqua Hotel, mining engineer, Dayton Coal and Iron Company.
- McGregor, James Howard, 1894, B. Sc., New York, assistant in Zoology, Columbia University.
- McGrew, John Alexander, 1895, C. E., M. of W., Pennsylvania Railroad Company, Logansport, Ind.
- McGuffey, Francis Hoyt, 1894, M. E. in EE., clerk Railway Mail Service, Columbus.
- McIntire, Alfred Heber, 1898, M. E. in EE., 1900, M. E., Mt. Vernon, O., care McIntire & McIntire, lawyers.
- McIntosh, Roscoe Everett, 1902, M. E., Schenectady, N. Y., 308 Summit avenue, General Electric Company.
- McKeon, Robert Dale, 1902, C. E., assistant in Engineer's Corps, P., C., C. & St. L. Ry., Logansport, Ind.
- McKinney, Frank Cowen, 1901, B. A., 1902, M. A., Parkersburg, W. Va., teacher in High School.
- McLaughlin, Annis, 1897, B. Ph. (Mrs. Henry Miller), Portsmouth, O.
- McLaughlin, James Audley, 1895, LL. B. (B. A., Monmouth College), Adena, O.
- McMahon, Mary Gertrude, 1903, B. Sc. (Dom. Sci.), Columbus.
- *McMakin, Amasa Brown, 1879, B. Sc., died May 22, 1891.
- McNary, George Bull, Jr., 1896, M. E. in EE., Toledo, O. 1764 Summit street, traveling salesman, Bissell & Co.
- McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., 1889, Ph. D., University of Chicago, Columbus, State University, Professor of Chemistry, O. S. U. Campus.
- Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.
- Mead, Rollo Nooman, 1895, D. V. M., meat inspector, Bureau Animal Industry, St. Paul, Minn.
- Meade, Caroline Annis, 1902, B. Ph., Columbus, O.
- Mebs, George H., 1897, G. Ph., Columbus, pharmacist, with Hatton Bros.
- Meek, Charles Wesley, 1894, LL. B., Toledo.
- Meek, Edward Duncan, 1896, B. A., 1899, M. A., 1903, LL. B., Glencoe.
- Meek, William W., 1899, B. Ph., Monroe avenue, Columbus, J. W. Meek & Co.
- Melche, Louis Hayes, 1903, D. V. M., North Royalton.
- Melick, Cyrus Alan, 1903, C. E., Columbus.
- Melick, Neil Albert, 1901, C. E., New York City, assistant engineer, N. Y. C. & H. Railway.
- Mendenhall, Maurice H., 1893, D. V. M., West Elkton.
- Menough, Arthur George, 1894, E. M., secretary and treasurer of Menough Iron and Steel Foundry Company, Wellsville, O.
- Mercer, Frank Emmet, 1896, M. E. in EE., Risdon Iron and Locomotive Works, San Francisco, Cal.
- Mercer, Robert Wood, 1903, E. M., Chesterhill.
- Merrill, Alice Louise, 1893, B. A., teacher, Chicago, Ill., "Englewood," 6425 Stewart avenue.
- Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.
- Merrill, Earnest Martin, 1902, C. E., Beckley, W. Va., draftsman, Deepwater Ry.
- Mershon, Ralph D., 1890, M. E., consulting engineer, 29 Broadway, New York City.

- Mesloh, Charles W., 1889, B. A., 1895, M. A., Associate Professor in German Literature and Language, State University, Columbus, University Campus.
- *Metters, Allen, 1896, B. A., died January 22, 1898.
- Metzger, Edward H., 1897, G. Ph., Circleville, O., pharmacist.
- Mickey, Blanche D., 1898, B. Ph., Shelby, teacher.
- Middlewart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Marietta, Ohio.
- Middleton, Ambrose, 1895, G. Ph., Malta, pharmacist.
- Miesse, Frank H., 1903, B. Ph., Chillicothe.
- Miller, Albert Arthur, 1902, C. E., Baltimore, Md., assistant engineer to Chief Engineer Maintenance of Way, B. & O. R. R.
- Miller, Carl James, 1898, B. Sc. (Agr.), Franklin, stock farmer.
- Miller, Charles C., 1883, B. A., Lima, superintendent of schools.
- Miller, Cornelia Williams, 1902, B. Ph., Columbus, O., 354 West Fourth avenue.
- Miller, Daniel Elmer, 1890, G. Ph., M. D. (Ohio Medical College, Cincinnati, 1900), Dayton, physician.
- Miller, Frank Case, 1893, C. E., Sacramento, Cal., 2611 J street, resident engineer, Southern Pacific Ry., Sacramento Division.
- Miller, Frederick A., 1901, B. Ph., Columbus.
- Miller, Gretchen P., 1900, B. Ph., Columbus, 1024 Highland street.
- Miller, Henry Franklin, 1889, M. E., Mansfield, O., assistant superintendent Ohio Brass Company.
- Miller, Henry P., 1897, D. V. M., Sunbury.
- Miller, Merritt Finley, 1900, B. Sc. (Agr.), M. S. A. (Cornell, 01), Instructor in Agronomy, State University, Columbus, 162 West Tenth avenue.
- Miller, Ralph Charles, 1901, C. E., maintenance of way department, P., C. & St. L. Ry., Pittsburg, Pa.
- Miller, Walter McNab, B. Sc., 1885 (M. D., 1897, San Francisco Medical College, student Leipsic, Germany), Reno, Nev., professor of Anatomy and Physiology, State University.
- *Milligan, James Porter, 1886, B. A., died February, 1899.
- Mills, Glendora, 1902, B. Ph., Marysville, O.
- Mills, Helen, 1902, B. Ph., Gallipolis, O.
- Mills, William C., 1898, B. Sc. (H. & F.), M. Sc., 1902, Curator Archaeological Museum, State University, Columbus, 19 West Tenth avenue.
- Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.
- Minor, Wells Hammond, 1903, E. M., Akron.
- Minshall, Thaddeus Ellis, 1901, LL. B., Columbus, coal business.
- Mitchell, Lynn Boal, 1903, B. A., Piqua.
- Mitzenberg, Allena May, 1901, B. Ph., Columbus.
- Mix, Edward W., 1888, B. Sc., Paris, France, superintendent "Le Societi des Establishments."
- *Mix, Melvin Noble, 1895, B. Ph.
- Mock, George Herbert, 1891, B. Sc., Ohio National Bank, Columbus.
- Mock, Marcia Inez, 1901, B. Ph., Camp Chase, O., care E. E. Zoen.
- Molloy, Mary Aloysia, 1903, B. Ph., Sandusky.
- Moloney, William Patrick, 1903, LL. B., Codding.
- Montgomery, Howard, 1896, B. Ph.
- Moodie, Alice Haynes, 1890, B. A. (Mrs. Arthur Hartwell), Pittsburg, Pa.
- Moon, Victor C., 1900, B. Ph., teacher of science, High School, Van Wert.
- Mooney, Charles Napoleon, 1900, B. Sc. (Agr.), assistant in Soil Survey, Bureau of Soils, U. S. Department of Agriculture, Washington, D. C.
- Mooney, Daniel Francis, 1894, LL. B., St. Mary's.
- Mooney, George Lewis, 1903, M. E. in EE. Woodfield.
- Moore, Clarence Lemuel Elisha, 1901, B. Sc., Washington C. H.
- Moore, Edgar Howard, 1900, B. Sc., Columbus.
- Moore, Henry Curtis, 1897, B. Sc., LL. B., 1901, Columbus, O.
- Moore, Lyman Gooderl, 1903, LL. B., Quaker City.
- Moore, Virgil Owen, 1895, B. Sc., M. D., Toledo, 1103 Starr avenue, physician.
- Moreno, Regino Teodoro, 1903, D. V. M., Corrientes, Argentina.
- Morgan, Roy, 1902, B. Ph., Frankfort, O.
- Morhart, Katherine Elizabeth, 1896, B. Ph., Pomeroy.
- Morlan, Wilbert, 1903, M. E., Rogers.
- Morrey, Annie Eliza, 1896, B. A., Chesterhill.

- Morrey, Charles B., 1890, B. A., 1896, M. D., Associate Professor in Bacteriology, State University, Columbus, 188 West Tenth avenue.
- Morrey, William T., 1888, B. A., New York City, teacher Physiography, Peter Cooper High School.
- Morris, Ingle A., 1900, LL. B., Columbus.
- Morris, Clyde T., 1898, C. E., principal assistant engineer Puget Sound Bridge and Dredging Company, Seattle, Wash.
- Morris, Robert Hamilton, 1901, E. M., engineer, Congo Coal and Mining Company, Congo, O.
- Morris, Willard Bernard, 1903, M. E., Columbus, 875 East Broad street.
- Morris, William Blaine, 1902, M. E., Mt. Vernon, O., 8 West Chestnut street.
- draftsman, C. & G. Cooper Company.
- Morrison, M. Frank, 1869, B. A. (Mrs. S. H. Short), New York City.
- Morrison, Robert O., 1893, C. E., Pittsburg, Pa., 1013 Pennsylvania avenue, assistant on engineer corps, Eastern Division, P. F. W. & C. Ry.
- Morrow, Charles James, 1900, D. V. M., meat inspector, Bureau of Animal Industry, St. Joseph, Mo.
- Morse, Max Withrow, 1903, B. Sc., Columbus.
- Morton, George L., 1884, M. E. (LL. B., National Law School), chief examiner instruments of precision, patent office, Washington, D. C., room 256.
- Morton, Max De Los, 1903, B. Ph., Ashtabula.
- Moses, Martha Allston, 1891, B. Ph., 1111 Hinman avenue, Evanston, Ill., book-keeper.
- Moss, Blanche, 1898, B. A., Columbus, Bradstreet's Mercantile Agency.
- Moss, William, 1898, G. Ph., Cambridge, O., general manager Cambridge Street Railway.
- Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Company.
- Muirie, Frederick John, 1902, B. A., Youngstown, O.
- Mull, Bert LaForrest, 1898, LL. B., A. B. (O. W. U.), Columbus, 114 Herman street.
- Mullay, Annie, 1887, B. Ph., Chicago, teacher, The Lessing Apartments.
- Mumma, Marion Wilson, 1901, B. Sc., assistant in chemistry, State University, Columbus.
- Mundhenk, Fred, 1896, B. Ph., life insurance agent, Toledo, O., 209 Nasby Bldg.
- Mundhenk, Herbert C., 1889, B. Ph., Brookville.
- Mundhenk, Ruth, 1899, B. Ph., Dayton.
- Munn, Mortimer Adam, 1894, C. E., Cleveland, civil engineer, E. P. Roberts Co.
- Munson, Theodore, 1898, B. Sc., Zanesville.
- Murdock, George Washington, 1901, B. Ph., Durango, Col.
- Murphy, Joseph Lincoln, 1903, C. E., McArthur.
- Murray, Claude R., 1895, B. A., Middleport, principal of High School.
- Murray, Frank Erskine, 1892, D. V. M., meat inspector, Omaha, Neb.
- Myers, Albert B., 1900, E. M., constructing engineer for Compania Metallurgica Mexicana, San Luis Potosi, Mexico.
- Myers, Joseph Simmons, 1887, B. A., Pittsburg, editor "Pittsburg Post."
- Myers, Ord, 1895, M. E. in EE., electrical engineer, Metropolitan Street Railway Company, New York City, 711 East 137th street.
- Myers, Roy V., 1893, C. E., Dayton, Tenn., Dayton Coal and Iron Co., Ltd.
- Myers, Uriah H., 1887, E. M., Pittsburg, Pa., 711 Liberty street, printer and stationer, care Myers & Shinkle.

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- Nauss, Ralph welty, 1901, B. Sc. (Chem.), Chicago, Ill., 3715 Langley avenue, student Northwestern University Medical School.
- Nash, Owen Arthur, B. A., M. A. (Denison University), LL. B., 1902, Newark, O.
- Nash, Simeon, 1901, B. A., Columbus, student, O. S. U. Law School.
- Needham, Harry J., 1900, M. E., special apprentice Pennsylvania R. R., Indianapolis, Ind.
- Needles, Ada Ruckle, 1901, B. Sc., Owosso, Mich., 326 North Washington street.
- Needles, Mana R., 1890, B. Ph. (Mrs. Kilpatrick), Owosso, Mich.
- Neill, Nelson Prentice, 1901, B. Sc. (Agr.), Washington, D. C., field assistant U. S. Soil Survey.
- Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina, R. R. No. 2, farmer.

Newton, Henry S., 1889, B. Sc., Syracuse, N. Y., general manager Syracuse, Lakeside & Baldwinsville Ry.
 Newton, Samuel Donald, 1895, C. E., Cleveland, Tenn.
 Nichol, Gertrude Bell, 1899, B. Ph. (Mrs. Addison), Columbus.
 Nichols, Ada May, 1902, B. Ph., Chillicothe, O.
 Nichols, Henry Birdsall, 1903, C. E., Painesville.
 Nicholson, Charles M., 1900, M. E. in EE., Bullock Electrical Manufacturing Company, Cincinnati, O.
 Nicola, Benjamin Di, 1900, LL. B., Barnhill.
 Nida, William Lewis, 1901, B. Ph., Stryker.
 Nidy, Herbert C., 1901, M. E. in EE., Schenectady, N. Y., 308 Summit avenue, General Electric Company.
 Niewvahrer, John Henry, 1891, B. A., Jackson, assistant cashier, First National Bank.
 Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.
 Nold, John H., 1900, E. M., assistant to F. A. Ray, Columbus, Ohio.
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 Nurian, Kerson, 1899, M. E., St. Louis, Mo., engineer mechanical and electrical department, St. Louis World's Fair.
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Obetz, Francis Henry, 1896, G. Ph., '99, M. D., Starling Medical College, Columbus, physician.
 O'Brien, Charles Francis, 1903, B. Ph., Urbana.
 O'Brine, David, 1881, B. Sc., M. Sc., 1882, E. M., D. Sc., M. D., Urbana, physician.
 Odebrecht, August, 1895, G. Ph., Columbus, with H. Braun & Sons, wholesale druggists.
 O'Kane, Sarah Eliza, 1891, B. Ph. (Mrs. F. M. Raymund), 215 West Tenth avenue, Columbus.
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 Orndorff, Earl Luther, 1903, B. Sc. (chem.), Wauseon.
 Orton, Clara Gregory, 1897, B. Ph., Columbus, 1043 Fair avenue, teacher Central High School.
 Orton, Edward, Jr., 1894, E. M., professor of Ceramics, State University, State Geologist of Ohio, Columbus, O., "The Normandie."
 Orton, Samuel Torrey, 1901, B. Sc., Philadelphia, Pa., medical student University of Pennsylvania.
 Orton, Walter Edwin, 1899, LL. B., Williamstown, Mass.
 Osborn, Abner A., 1900, B. Sc., Columbus.
 Osborn, Samuel Galloway, 1897, LL. B., Columbus, 275 East State street, attorney.
 Osborn, Raymond Carroll, 1898, B. Sc., 1900, M. Sc., New York City, Columbia University, Department of Zoology.
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 Page, William Herbert, 1892, LL. B., 1894, LL. M. (B. A., Yale), Professor of Law, State University, Columbus, 1068 Franklin avenue.
 Palmer, Walter K., 1893, M. E., State University, Kansas City, Mo., consulting electrical and mechanical engineer, 401 N. Y. Life Building.
 Parker, John Bernard, 1898, B. A., 1900, M. A., Danville.
 Parmenter, William W., 1900, B. A., Oskaloosa, Iowa.
 Parrett, Benjamin Creamer, 1902, B. Sc., Sault Ste. Marie, Ontario, Canada, assistant chemist, The Lake Superior Power Company.
 Parsons, George McLellan, 1901, B. Ph., Columbus.
 Patch, Homer Austin, 1896, C. E., Minneapolis, Minn., draftsman, Minneapolis Steel and Machinery Company.

- Patchell, Owen P., 1889, B. Ph., Paul's Valley, Indian Ter., attorney-at-law.
- Patchin, Rufus Harry, 1898, I. L. B., A. B. (Allegheny College), Cleveland, 533 Society for Savings Building, attorney-at-law.
- Paterson, Bertha Gildersleeve, 1901, B. A., instructor in Gallaudet College, Washington, D. C.
- Pavlicek, Frank Joseph, 1901, B. Ph., Toledo, 750 Indiana avenue.
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- Peal, Allen Saunders, 1895, B. A., Chicago, Ill.
- Pearce, George Dower, 1892, G. Ph., South Charleston, O., pharmacist.
- Pearl, Allen Sexton, 1894, M. E. in EE., Chicago, Ill., Ohio representative of Central Electric Company.
- Pease, Edward Livingstone, 1895, B. A., 1899, I. L. B., Columbus, Indianola avenue, attorney-at-law.
- Pedlow, Edward Benjamin, 1893, C. E., New Straitsville, superintendent Columbus and Hocking Coal and Iron Company.
- Peppel, Samuel Vernon, 1899, B. Sc. (Chem.), Louisville, Ky.
- *Pence, David Arrel, 1894, M. E., died December 15, 1901.
- Perkins, Earl Harley, 1893, I. L. B., Wellington.
- Perry, Elma Brooks, 1901, B. Sc. (Dom. Sci.), B. Ph., Menominee, Wis., head of Stouts' Manual Training School and Instructor in Domestic Science.
- Perry, John Cole, 1901, B. Sc. (Agr.), Copopa, O., farmer.
- Peters, William Lincoln, 1885, M. E., Riverside, Cal., horticulturist.
- Petersen, John William, 1903, C. E. (Arch.), Port Clinton.
- Pfarr, Philip Lewis, 1896, B. Sc. (Agr.), Riverside, Wash., Okanogan county, farmer.
- Phelps, Cyrus Alba, 1892, B. Sc., Chalchihuites Zac, Mexico, Treasurer cia Minerva "Huiriacic" S. A.
- Pierce, John Mattison, 1895, M. E. in EE., South Charleston.
- *Pilcher, Hastings Moore, 1895, M. E. in EE., died March 14th, 1902.
- Pitts, Grace Lenore, 1900, B. Ph., 1901, M. A., Columbus, East Gay street.
- Plantz, Wyatt Carfield, 1894, B. A., Pomeroy.
- Pleukharp, Rev. Chas. V., 1885, M. E., La Crescenta, Cal.
- Plimmer, Gertrude Alice, 1896, B. Ph., Columbus, 1188 Oak street.
- Plum, Harley Martin, 1902, B. A., teacher of science in High School, Colorado Springs, Colo., 14 South Corona street.
- Pocock, Lucy Hunt, 1902, B. Ph., Worthington, O.
- Poindexter, Charles Cordoza, 1903, B. Sc. (Agr.), secretary to Prof. Hunt, Ithaca, New York.
- Polk, Walter C., 1895, C. E., Kansas City, Mo., Bryant Bldg., engineer Central Construction Co.
- Pomerene, Frank Etherington, 1891, B. Ph., 1895, I. L. B., Coshocton, attorney-at-law.
- Pool, Harwood Redington, 1881, B. Ph., I. L. B., 62 Cedar street, New York City.
- Porter, Clyde C., B. S. (Heidelberg, 1899), 1903, I. L. B., Tiffin.
- Porter, George Henry, 1901, B. Ph., Clyde, O.
- Porter, Mary Baxter, 1897, B. Ph. (Mrs. Misseldine).
- Porter, Minnie Ella, 1903, B. Ph., teacher in High School, New Philadelphia.
- Postle, Carl Hadley, 1903, B. Ph., Columbus.
- Postle, Herman R., 1894, C. E., Columbus, East Seventh avenue, teacher in North High School.
- Postle, Kenneth E., 1894, B. A., Lancaster Ky., teacher.
- Postlewaite, David Neal, 1899, I. L. B., A. B. (Northern Indiana University), Columbus, attorney.
- Poto, Frank Bert, 1901, B. Sc. (Chem.), assistant chemist National Steel Co., Columbus.
- Powell, Charles S., 1893, M. E. in EE., London, West, England, Brown's Hotel, Albemarle street, Westinghouse E. & M. Co.
- Powell, Cornelia Thompson, 1902, B. A., Columbus, 518 East Broad street.
- Powell, Edward Thompson, 1896, I. L. B., A. B. (O. W. U.), Columbus, 518 East Broad street, attorney.
- Powell, Norman Clemson, 1895, D. V. M., Damascus.
- Prall, Anna Dickson, 1898, B. A., Columbus, King avenue, pension office.
- Pratt, Fred K., 1900, C. E., Cleveland, O., 1235 1/2 Euclid avenue, engineer, Wheeling & Lake Erie R. R., 514 Electric Building.

- Price, Homer Charles, 1897, B. Sc. (Agr.), (M. Sc., Cornell, 1899), Professor of Agriculture, Ohio State University, Columbus.
- Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.
- Prince, Frank Joseph, 1902, B. Sc., teacher in Bellefontaine High School.
- Pruner, William Reist, 1902, I. L. B., Springfield, O.
- Pryor, Charles Foster, 1898, I. L. B., Columbus.
- Pugh, Lawrence Randolph Whetzel, 1893, B. Ph., 1895, I. L. B., Columbus, 13 Broad of Trade attorney-at-law.
- Pulling, Margaret G., 1900, B. Ph., 1901, M. A., Columbus, 55 Ohio avenue.
- Pumphrey, John Homer, 1898, B. Sc., Clayton, O., Montgomery county.
- Putnam, Abbey Slocum, 1897, B. Ph., Colorado Springs, Colorado.

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- Randall, Emilius Oviatt, 1892, I. L. M. (B. Ph., Cornell University), attorney-at-law, Professor of Law, State University, Columbus, 1025 Oak street.
- Randolph, Edward S., 1897, I. L. B. (A. B., Ohio Wesleyan University), Somerset.
- Rane, Frank William, 1891, B. Agr. (1892, M. Sc., Cornell, Durham, N. H., Professor of Horticulture, New Hampshire College.
- Rarick, Murray M., 1896, B. Sc. (Agr.), Jacksontown, physician.
- Razor, Samuel Eugene, 1898, B. Sc., M. A., 1902, instructor in Mathematics, State University, Columbus, 1594 Neil avenue.
- Rawson, Levi, 1899, C. E., Sistersville, W. Va., Carter Oil Co.
- Ray, Frank A., 1887, E. M., Professor of Mine Engineering, State University, 137 King avenue, Columbus O.
- Ray, William M., 1893, C. E., room 825, Hickox Building, Cleveland, assistant engineer, B. & O. R. R.
- Raymond, Coles Abel, 1894, C. E., Toledo, O., draughtsman American Bridge Co.
- Raymond, Maud, 1899, B. Ph., 1901, M. A. (Mrs. William Tipper), Waynesburg, Pennsylvania.
- Raymond, Frank M., 1888, B. A., Columbus, 215 West Tenth avenue, attorney-at-law.
- Redick, Mary Glisson, 1898, B. Ph., Findlay.
- Redrow, Clara Melissa, 1903, B. Ph., Williamsburg.
- Redrow, Walter L., 1900, B. Sc., Bureau of Patents, Washington, D. C.
- Reed, Garfield Nathaniel, 1903, M. E., Youngstown.
- Reed, Robert Browning, 1896, M. E. in EE., Ft. Wayne, Ind., 133 East Tenth street.
- Reed, William Allen, 1897, E. M., Telluride, Colo., Liberty Bell Gold Mining Co.
- Rees, Edith Coleste, 1901, B. A., Columbus.
- Reese, David R., 1901, B. A., Shawnee.
- Reese, William Daniel, 1891, B. A., Southborough, Mass., St. Marks School.
- Reese, William Henry, 1896, G. Ph., Glen Roy, dealer in Gent's Furnishings.
- *Reeves, Archibald C., 1887, C. E., died October 2nd, 1902.
- Resler, Edwin D. (B. A., Otterbein), 1897, M. A., Monmouth, Oregon.
- Rice, Clarence Stahl, B. A., 1900, M. A., 1903 (Wittenberg), 1903, I. L. B., Springfield.
- Rice, Herbert A., 1897, C. E., South Bethlehem, Pa., 516 Pawnee street, instructor in Civil Engineering Department, Lehigh University.
- Rice, Mabel Elise, 1898, B. A. (Mrs. Milliam Winshall), Cleveland, Ohio, 277. Harkness avenue.
- Rice, Mary Washington, 1900, B. A., Columbus.
- Rice, Susan Esther, 1899, B. A., Columbus, 111 West Fifth avenue.
- Richardson, Hamilton Hutchinson, 1892, B. Agr., South Brooklyn, O., Vegetable and Fruit Grower.
- Richardson, Robert Edwin, 1903, B. A., Toledo.
- Richardson, William Waddle, 1899, B. Ph., Washington, D. C.
- Richey, Luzerne A., 1897, B. Ph.
- Rickey, Alla B., 1889, B. Ph. (Mrs. George H. Cless), Eighteenth street, Columbus.
- Rickey, Tallmadge A., 1900, B. Ph., Columbus.
- Riddle, Howard Sterling, 1897, M. E. in EE., Akron, mechanical engineer, Diamond rubber Co.
- Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Columbus, O., 160 West Fifth avenue, graduate student, O. S. U.
- Ridenour, Walter Ashton, 1902, B. Ph., Jackson, O., hardware business.

- Rietz, Henry Lewis, 1899, B. Ph., Indianapolis, Ind., 355 Downey avenue, Professor of Mathematics, Butler University.
- Reitz, John Harrison, 1903, D. V. M., Gilmore.
- Riggs, Ernest Jacob, 1895, B. Sc. (Agr.), M. Sc. (H. & F.), (Cornell), Raccoon Island, Ohio, Fruit Grower & Stock Farmer.
- Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, 1528 Worthington street, instructor in American History and Political Science, O. S. U.
- Rightmire, Robert Elwood, 1902, M. E., Columbus, O., 149 West Ninth avenue, special apprentice with Hocking Valley Ry.
- Ritchey, Joseph C., 1890, B. Sc., Cleveland, O., chemist, American Works Q. S. & W. Co.
- Ritchie, George Alexander, 1903, C. E., Hudson.
- Roach, Simeon Andrew, 1899, B. Ph., Chillicothe, 74 East Seventh street.
- Robbins, George A., 1899, B. Ph., Columbus, Lexington avenue.
- Roberts, Cyrus Swan, 1898, E. M., civil engineer and assistant superintendent Montezuma Lead Co., Santa Barbara, Chihuahua, Mexico.
- Robinson, Eckka Mazola, 1892, B. Sc. (Mrs. George Rowe).
- Robinson, Erdis Geroska, 1893, C. E., resident engineer, engineering department of Mexican Central Railway, Guadalajara, Mexico.
- Robinson, Zella Vinna, 1898, B. Ph., 1900, M. A. (Mrs. Otto Fitzalan Hakes), Dunkirk, N. Y.
- Rockwell, Mary Fannie, 1899, B. Ph., Columbus.
- Roebuck, Carl Fletcher, 1900, B. Ph., 1902, LL. B., Columbus.
- Roedel, Frederick Augustus, 1903, B. A., Zanesville.
- Rogers, Andrews, 1896, B. Ph., West Jefferson, O.
- Rogers, Frank Persons, 1899, B. A., Columbus, 140 Warren street.
- Rogers, James Bertrand, 1896, E. M., assistant superintendent Salem Iron Co., Leetonia, O.
- Roney, Mary Malvina, 1901, B. Ph., Columbus.
- Root, Willis J., 1885, E. M., Columbus, general superintendent National Steel Co.
- Ross, Calvin Burt, 1903, M. E. in EE., Urbana.
- Rothrock, Maynard Wilbur, 1903, B. A., Akron.
- Rowlee, Henry A., 1897, M. E., Columbus, inspector ordnance department U. S. A.
- Ruhlen, Carl Marble, 1898, M. E., Port Townsend, Wash., draftsman, Quartermaster's Department U. S. A.
- Ruhlen, Frank, 1896, B. Sc. (Agr.), Columbus, instructor in Zootechny, State University, O. S. U. Farm House.
- Ruhlen, La Mott, 1902, B. Sc., Plain City, Ohio, farmer.
- Rule, Ralph R., 1897, LL. B. (B. S., Tri-State College, Ind.), Greenspring, O.
- Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School, 842 South High street.
- Russell, Ralston, 1896, B. Ph., Pomeroy.
- Ryland, Paul Dillon, 1901, C. E., Pittsburg, Pa., 1013 Pennsylvania avenue, assistant on Engineer's Corps, Maintenance of Way Department, Eastern Division P. F. W. & C. Ry.

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- Sabine, Annie Ware, 1884, B. A., 1886, A. M. (1888, B. Sc., Mass. Institute Technology), (Mrs. W. H. Siebert), Columbus.
- Sabine, Wallace Clement, 1886, B. A. (M. A., Harvard), 481 Beacon street, Boston, Mass., Assistant Professor of Physics, Harvard University.
- Sackett, Carl Leroy, 1901, LL. B., Sheridan, Wyo.
- Safford, Robert Edwin, 1894, B. Sc., New York City, Mexican Metallurgic Co.
- Salm Edna Esther, 1902, B. Ph., Columbus.
- Sanders, Ernest Avery, B. A. (Otterbein University), 1903, M. A., Westerville.
- Sanders, James Glossbrenner, B. Ph. (Otterbein), 1903, M. A., Westerville.
- Sandoe, Lydora Olivia, 1893, LL. B. (Mrs. Bachman), 1425 Bryden Road, Columbus.
- Sater, Clinton Hruon, 1902, D. V. M., Sater, O.
- Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., attorney, 114 Buttles avenue, Columbus.
- Sayre, Charles B., 1900, B. A., secretary Athletic Club, Cincinnati, O.
- Scarlett, Henry Lancelot, 1901, B. A., 1903, LL. B., Columbus, 971 Bryden Road.
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- Schaeffer, Freelan Wilbert, 1900, B. Sc. (Agr.), Columbus, West Fifth avenue, dairyman, proprietor Standard Milk Co.

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 Schaub, Edward Louis Tascher, 1885, M. E., Columbus, O., 1113 South High street, draftsman, Jeffrey Mfg. Co.
 Schaup, Charles E., 1897, E. M., chief engineer Southern Coal and Transportation Co., Berrysburg, W. Va.
 Scheibel, William O., 1888, E. M., Columbus, secretary and general manager The American Art Tile Co., 1040 Fair avenue.
 Schantz, Albert John, 1902, B. Sc., Montpelier, O.
 Schlafly, Royden Karl, 1903, C. E., Mt. Eaton.
 Schlesinger, Hugo Nathan, 1899, I. L. B., Xenia.
 Schoedinger, Ferdinand Philip, 1902, B. A., Columbus.
 Schoedinger, Frederick H., 1902, I. L. B., B. Ph. (Northwestern University), Columbus.
 Schreiber, George E., 1900, M. E. in EE., Kansas City, Mo., with Ford, Bacon & Davis, Engineers, 1500 Grand avenue.
 Schreiber, John Martin, 1899, M. E. in EE., Cleveland, Cleveland Electric Street Railway.
 Schroll, Otto, 1886, C. E., Richmond, Ind., Union Station, superintendent Richmond Division P. C. C. & St. L. Ry. Co.
 Schubert, Charles Wesley, 1903, C. E., Columbus.
 Schueller, Erwin Waldemar, 1892, B. A., 1894, M. D., 465 South High street, Columbus, physician.
 Schwab, Frank Wilbert, 1902, B. Sc., Newcomertown, O., chemist, James B. Clow & Sons.
 Schwier, Minona, 1897, B. A., Columbus, 212 East Mound street.
 Scott, Anna Neil, 1886, B. A., 1274 Summit street, Columbus.
 Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.
 Scott, Herbert, 1893, B. Sc., pastor M. E. church, Marietta, O.
 Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., 124 Elysian avenue, chief electrician Westinghouse E. & M. Co.
 Scott, Daisy Medill, 1897, B. A., Columbus, teacher in High School.
 Scott, Dudley, 1900, B. Ph., Cleveland, O.
 Scott, Emma, 1888, B. Sc., Brindiban, India, missionary.
 Scott, Ernest, 1897, B. Sc. (Agr.), M. D., Columbus, O., 873 North High street, physician.
 Scott, Mary Odella, 1885, B. A., Columbus, 87 West Fourth avenue, teacher in High School.
 Scott, Mary Bole, 1896, B. A., Columbus, 926 Oak street, Columbus School for Scott, Mary Bole, 1896, B. A., Columbus, 926 Oak St., Columbus School for Girls.
 Sears, Walter James, 1894, B. Ph., Chillicothe, with Sears & Nichols Co.
 Sedgwick, Edward Crayton, 1895, M. E. in EE., Columbus, Case Mfg. Co., chief engineer.
 Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist, Ohio Experimental Station.
 Sellenings, Albert Eugene, 1896, B. Ph., M. D., 102 East Thirty-first street, New York, physician.
 Seney, Allen J. (B. Ph., University of Michigan), 1899, I. L. B., North Baltimore.
 Seney, George E. jr., 1901, I. L. B., Toledo, O.
 Senter, Herbert Pike, 1902, C. E., Bay City, Mich.
 Serva, Adam A., 1893, M. E. in EE., Ft. Wayne, Ind., assistant sales manager & assistant secretary Ft. Wayne Electric Works.
 Seymour, Raymond J., 1900, B. Sc., Columbus, 76 West Third avenue, Fellow in Anatomy & Physiology, O. S. U.
 Shank, Robert J., 1897, I. L. B., Hamilton.
 Sharp, Charles C., 1888, C. E., president Raven Coal and Coke Co., superintendent Boomer Coal and Coke Co., Boomer, W. Va.
 Sharp, David Barton, 1893, I. L. B., Columbus, 335 West Fourth avenue.
 Shaw, Edward Lee, 1902, B. Sc. (Agr.), Columbia, Mo., assistant in Agriculture, University of Missouri.
 Shaw, Harry R., 1901, B. Ph., Zanesville.
 Shellabarger, Marley Rolin, 1897, B. Sc. (Agr.), Garland, O., Farmer.
 *Shepard, Frank Reed, 1893, B. A., died August, 1893.
 Shepard, Harvey Leonard, 1903, B. Sc. (Chem.), Cincinnati.
 Shepherd, Charles W., 1900, C. E., draftsman, Illinois Steel Co., North Works, Chicago, Ill.

- Sherman, Christopher Elias, 1894, C. E., Columbus, 772 Oak street, professor in Civil Engineering, State University.
- Sherman, John King, 1901, C. E., assistant on Engineering Corps P. C. C. & St. L. Ry., Pittsburg, Pa., Room 1114 Union Station.
- Sherman, Thomas M., B. Sc. (National Normal University, 1898), 1903, LL. B., Columbus.
- Shield, Wallace B., 1898, B. A., Kansas City, Mo., 1221 Woodland avenue, Manual Training High School.
- *Short, Sidney H., 1880, B. Sc.
- Shuck, Carey Lucas, 1898, B. Ph., "Pittsburg Post," Pittsburg, Pa.
- Shurtz, Olive L., 1898, B. Ph., Columbus, 26 King avenue.
- Siebert, Wilbur H., 1888, B. A. (B. A., 1889, M. A., 1890, Harvard), Columbus, 206 West Tenth avenue, Professor European History, Ohio State University.
- Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D. (Johns Hopkins University), Minneapolis, Minn., professor of Zoology, University of Minnesota.
- Sigerfoos, Edward, 1891, B. Ph., Vigan, Illocees Sur, P. I., Capt. 51st U. S. Infantry.
- Simonton, Mark, 1895, M. E. in EE., Columbus, treasurer and general manager Electric Supply and Construction Co.
- Simpson, Abigail Ellen, 1895, B. A., Canton, O.
- Simpson, Warner Pike, 1902, B. Ph., Worthington.
- Singleton, Charles Tod, 1900, B. Ph.
- Sinks, Frederick Nicholas, Ph. B. (Yale University), 1898, LL. B., Columbus, Miller avenue, attorney-at-law.
- Skiles, Roscoe Carleton, 1901, LL. B., Shelby, 1266 East Main street, Mayor of Shelby.
- Skinner, Charles E., 1890, M. E., Pittsburg, Pa., 424 Franklin avenue, Sta. D, Westinghouse E. & M. Co.
- Slater, Burr Homer, 1895, G. Ph., Chesterville, pharmacist.
- Sloctemyer, Carl Frederic, A. B. (St. Xavier College), 1903, M. E. in EE., Cincinnati.
- Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.
- Smith, Albertine, 1900, B. Ph., Columbus.
- Smith, Alice May, 1897, B. Ph.
- Smith, Burton Griffin, 1895, G. Ph., chemist for Columbus Pharmacal Co., Columbus, O.
- Smith, Carl Clyde, 1890, B. Ph., Brush, Colo.
- Smith, Clarence Elmer, 1898, G. Ph., M. D. (O. M. U., '01), Warren, O., physician.
- Smith, David William, 1899, C. E., Columbus, engineer Hocking Valley Ry. Co.
- Smith, Edward E., 1897, G. Ph., Indian Territory.
- Smith, Edward Trevette, 1898, LL. B., Columbus, O., King Building.
- Smith, Florizel, 1880, B. A., Spahr Building, Columbus, attorney-at-law, 970 Bryden Road.
- Smith, Harry Ford, 1902, M. E., Lexington, O., manager Electric Light Plant.
- Smith, Horace Prescott, 1886, B. Sc.
- Smith, Maud Virginia, 1894, B. A. (Mrs. Thomas Chalmers), Port Huron, Mich.
- Smith, Myron Alphonso, 1892, B. Ph., Columbus, 52½ North High street.
- Smith, Nathaniel B., 1893, D. V. M.
- Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.
- Smith, Philotas Mottier, A. B. (Franklin College), 1903, LL. B., Egypt.
- Smith, Virginia Roletta, 1900, B. Ph. (Mrs. Raymond McCallum), Dayton, O.
- Smith, Warren Lee, 1899, LL. B., B. A. (Wooster University), Columbus, O.
- Snider, Charles M., 1897, B. Sc. (Ind. Arts), Columbus, 162 West Mound street, draftsman, Jeffrey Mfg. Co.
- Snider, Jesse Worthington, 1893, LL. B., 1896, LL. M., Columbus, 340 Denmead avenue.
- Snively, Harry H., 1895, B. A., 1903, M. A., Columbus, M. D. (Ohio Medical University), 873 North High street, physician.
- Snow, Mason J., 1902, LL. B., Columbus.
- Snow, Walter A., 1897, B. Ph., Park Place, Minneapolis, Minn., pastor Congregational church.
- Snyder, Addison Hogan, 1901, B. Sc. (Agr.), Washington, D. C., Bureau of Soils, U. S. Department of Agriculture, Soil Expert.
- *Snyder, Henry, 1879, B. Sc., 1892, M. Sc. Died September, 1898.
- Snyder, James Edward, 1892, LL. B. (B. A., Wooster University), Burbank, O.

- Snyder, Walter S., 1897, LL. B., Columbus, 69 North Fourth street, attorney.
- Somermeier, Edward Everett, 1898, G. Ph., Columbus, instructor in Mineralogy and Metallurgy, State University, 1590 Neil avenue.
- Sosman, Robert Browning, 1903, B. Sc. (Chem.), Chillicothe.
- Souder, Charles Granville, 1903, B. Sc., Lafayette, Ind.
- Southard, Eustace Elden, 1895, G. Ph., Columbus, 470 Oak street, pharmacist.
- Southard, Thomas Campbell, 1896, B. A., Columbus, 470 Oak street.
- Sparks, Edwin Earle, 1884, B. A., 1892, M. A., 1900, Ph. D., Chicago University, Associate Professor, Chicago, Ill.
- Sparks, Homer Haven, 1902, LL. B., Columbus.
- Spencer, William Henry, 1891, G. Ph., Sandusky, with Strong and Spencer.
- Spencer, Ralph Oliver, 1899, B. A., Columbus.
- Sperr, Frederick W., 1883, E. M., Houghton, Mich., Professor of Civil and Mining Engineering, Michigan School of Mines.
- *Sperry, Wilmot, jr., 1901, B. Ph., died February, 1903.
- Sprague, Charles Franklin, 1896, B. A., 1899, LL. B., Lima O., Metropolitan Block.
- Sprague, Clarence Milton, 1899, C. E., Pittsburg, Pa., 1013 Pennsylvania avenue, assistant on Engineer's Corps P. C. C. & St. I., Pittsburg Division.
- Sprague, William Ralph, 1899, B. Ph., Portsmouth, O., attorney-at-law.
- Sproat, Amasa Delano, 1902, E. M., Mexico, San Luis Potosi, Apartado 132, assistant chemist, Compania Metallurgica, Mexicano.
- Sproat, Martha Evans, 1903, B. Ph., Columbus.
- Spurrier, Emery Allen, 1903, LL. B., Columbus.
- Spurrier, John Randolph, 1896, M. E. in EE., Manchester, Eng., Trafford Port, foreman Detail Division of Mechanical Department of British Westinghouse E. & M. Co.
- Stahl, Charles Henry, 1902, LL. B., Winesburg, O.
- Staley, Marcellus, 1899, M. E. in EE., New York City, 158 West Sixty-second street, firm of Staley & Gillespie, Electrical Contractors, 395 West Broadway.
- Stanberry, Charles L., 1892, G. Ph., pharmacist, McConnelssville.
- Starbuck, Daniel Carl, 1899, M. E. in EE., chief electrician flag ship "Chicago," U. S. N.
- Stauffer, Clinton Raymond, 1903, B. Sc., Columbus.
- Steeb, Carl Eckert, 1899, B. Ph., Columbus, 1437 Hunter street, accountant, O. S. U.
- Stellhorn, Adolf, A. B. (Capital University), 1903, C. E., Columbus.
- Stephenson, Bertram Shearer, 1901, B. Ph., Columbus, O., Columbus "Citizen."
- Stephenson, Henry Thew, 1894, B. Sc., Bloomington, Ind., instructor in English, University of Indiana.
- Stevens, Frank M., 1897, LL. B., Elyria, attorney-at-law.
- Stevenson, Amos Claude (A. B., Oberlin College), 1900, LL. B., Toledo, O.
- Steward, Charles Benjamin, 1900, B. Sc. (Agr.), Canal Winchester, R. R. No. 2, stock farmer and breeder of Shorthorn cattle and Poland China swine.
- Stewart, Edwin Earle, 1895, LL. B., A. B. (Wittenberg College), (M. A., Antioch College), attorney, Springfield.
- Stewart, Gilbert Holland, jr., 1903, LL. B., Columbus.
- Stewart, Lee Raymond, 1896, C. E., engineer in charge of Mould Loft, N. Y. Ship Building Co., Camden, N. J.
- Stewart, Hartford Toland, 1896, M. E. in EE., agent General Electric Co., Columbus.
- Stiger, Thomas A., 1899, LL. B., Bucyrus.
- Stimson, Charles Leslie, 1899, B. A., Columbus, 737 Bryden Road.
- Stimson, George, 1900, B. A., Columbus, 737 Bryden Road, student Medical Department, University of Pennsylvania.
- Stinebaugh, Isaac Long, 1892, C. E., surveyor and civil engineer, Rockaway, O.
- Stockier, James Arthur, 1902, C. E., Charleston, W. Va., 151 Summers street, assistant engineer on Kanawha & Michigan Ry.
- Stone, Carlton Elijah, 1899, C. E., Cincinnati, O., 405 Customs House, junior civil engineer U. S. Engineer Department.
- Stone, Thomas Wade, M. E. 1902, Ft. Wayne, Ind., 1504 Hurd street, chief draftsman, Western Gas Construction Co.
- Storer, Norman Wilson, 1891, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.

- Storer, Simon B., 1893, M. E. in EE., Syracuse, N. Y., engineer and salesman, Westinghouse E. & M. Co.
- Stouffer, Charles Irwin, 1893, LL. B., Columbus, The "Marechal-Neil" Flats, attorney.
- Stoughton, George L., 1895, LL. B. (B. A., Otterbein University), Westerville, O.
- Stull, Emmett Willet, 1894, M. E. in EE., Pittsfield, Mass., Stanley Electric Mfg. Co.
- Stull, Ray Thomas, 1902, E. M., chemist, American Terra Cotta and Ceramics Co., Terra Cotta, Ill.
- Stump, Franklin Pierce, 1892, B. Agr., Convoy, farmer.
- *Stump, John William, 1895, C. E., died May 31, 1900.
- Stump, William Lisle, 1897, G. Ph., 1898, M. Ph., Marion, O., pharmacist with M. D. Dumble.
- Surface, Harvey Adam, 1891, B. Sc., 1892, M. Sc., professor Biology Pennsylvania State College, State College, Pa.
- Sutherland, Margaret, 1898, B. Ph. (Mrs. Benjamin Flynn), Columbus.
- Sutphen, James Leonard, 1897, G. Ph., Columbus, 673 Livingston avenue, pharmacist.
- Swaney, Sara Campbell, 1902, B. Ph., East Liverpool, O.
- *Swartzel, Earl Glenn, 1895, B. Sc., died March, 1899.
- Swartzel, Karl Dale, 1893, B. Ss., 1894, M. Sc., Columbus, Assistant Professor of Mathematics, State University.
- Swisher, William Henry, 1896, G. Ph., M. D., Eaton, physician.
- Sykes, William Edgar, 1898, LL. B., A. B. (Marietta College), Marietta.
- Sylvester, John E., jr., 1898, B. Ph., Wellston, editor "Wellston Telegram."
- Talbot, Ellen B., 1890, B. A., Ph. D. (Cornell), Troy, N. Y.
- Talbot, Herbert Swan, 1898, B. Ph., Columbus, clerk Columbus Board of Trade, 640 Franklin avenue.
- Talbot, Mignon, 1892, B. A., 167 West Tenth avenue, Columbus, teacher in High School.
- Tangemann, Henry Theodore, 1902, LL. B., Kettleville O.
- Tanner, Elwood Wood, 1902, M. E., Canton, O., draftsman, The Aultman Co.
- Tanner, John Robert, 1900, LL. B., Mt. Sterling, O.
- Tatje, Oral D., 1903, B. Ph., Columbus.
- Taylor, Arthur W., 1894, E. M., Cleveland, chemist for Otis Steel Co., Ltd.
- *Taylor Francis Asbury, 1885, B. A., died July 25, 1891.
- Taylor, Alexander R., 1895, B. Sc.
- Taylor, Bessie Batelle, 1902, B. Ph., Bladenbrug, O.
- Taylor, Frederic Wellington, 1900, B. Sc. (Agr.), Washington, D. C., Bureau of Soils, field assistant U. S. Soil Survey.
- Taylor, Mary Hill, 1903, B. Ph., Columbus.
- Taylor Ralph Buren, 1895, B. A., M. A. (Columbia University), Columbus.
- Taylor, Joseph Russell, 1887, B. A., M. A. (Columbia University), Columbus, 222 King avenue, associate professor English Literature, State University.
- Taylor, Pearl V., 1897, B. A., Columbus, 46 West Noble.
- Taylor, William Harry, 1902, B. Ph., Columbus.
- Templin, John Richard, 1903, M. E., Columbus.
- Teter, Anstie Welsh, 1896, G. Ph., Bainbridge, pharmacist.
- Teter, J. Sumner, 1901, B. Sc., Columbus.
- Thomas, James O. 1897, C. E., Columbus, 404 West Goodale, wire chief Central Union Telephone Co.
- Thomas, Lawrence David, 1900, B. Ph., Lancaster.
- Thompson, Carmi A., B. Ph., 1895, LL. B., Ironton, 151 Center street, city solicitor.
- Thompson, Howard N., 1888, B. Ph., Washington D. C., correspondent Associated Press.
- Thompson, Roy Washington, 1903, B. Ph., Gallipolis.
- Tomlinson, James Rowe, 1892, C. E., El Paso, Tex.
- Towne, Robert S., 1879, B. Sc., 1880, E. M., New York, N. Y., 27 William street, president Compania Metallurgica Mexicana.
- Townshend, Alice Margaret, 1880, B. A. (Mrs. Charles Wing), Columbus.
- Townshend, Arthur Bailey, 1878, B. Sc., M. D., 33 West Thirty-Third street, New York, N. Y., physician.
- Travis, Fred Lant, 1900, B. A., Pana, Ill., teacher.
- Travis, John F., 1900, B. A., 1902, M. A., Cambridge, Mass., 51 Wendell street.

- Treash, Phillip Burdell, B. Ph. (Oberlin), 1903, LL. B., Akron.
 Tufts, Charles Hill, 1899, E. M., Pittsburg, Pa., Fifteenth and Pennsylvania avenue, chief chemist for American Steel and Wire Co, Shoenberger Works.
 Tupper, Eugene L., 1893, G. Ph., Ottawa, physician.
 Turner, Arthur M., 1893, M. E. in EE., 281 Oak street, Chicago, Ill.
 Turner, Bertha Louise, 1903, B. Ph., Columbus.
 Turner, Edward C., 1901, LL. B., Columbus, graduate law student. O. S. U.
 Turner, Frederick Lewis, 1897, B. A., 1898, M. A., Oak Park, Ill., 449 North Boulevard, teacher of Latin, Oak Park High School.
 Twiss, Edith Minot, 1895, B. A., Cleveland, teacher in West High School.
 Twiss, George R., 1885, B. Sc., Cleveland, teacher of Physics in High School.
 Twiss, Marion Evans, 1897, B. A., Librarian University of North Dakota.
 Twitchell, Lee Downs, 1903 B. Sc. (H. & F.), Mansfield.
 Tyler, Frederic Jared, 1900, B. Sc. (H. & F.), 1902, M. A., Washington, D. C., Division of Botany, U. S. Department of Agriculture, Scientific Aid.

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